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ABSTRACT

Among the papers and presentations are: the keynote speech (E. Alden Dunham); the quality baccalaureate myth (Richard Giardina); the high school/college interface and time-shortening (panel presentation); restructuring the baccalaureate: a follow-up study (Robert Bersi); a point of view (Richard Meisler); more options: less time? (DeVere E. Pentony and Thomas M. Watts); state policy-makers, advocates, neutrals or opponents (John M. Smart and Charles Evans); student responses to time-shortened degree programs (panel presentation, SUNY); time-shortened degree programs in perspective (panel presentation, U.C. Berkeley); and summary (JB Lon Hefferlin). Appendices listing participants and programs represented in the conference are included. (MSE)

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PREDICTION, PERFORMANCE & PROMISE:

PERSPECTIVE ON TIME-SHORTENED DEGREE PROGRAMS

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREDICTION, PERFORMANCE & PROMISE:

PERSPECTIVE ON TIME-SHORTENED DEGREE PROGRAMS

John M. Smart and Toni A. Howard, Editors

PROCEEDINGS OF A CONFERENCE OF
TIME-SHORTENED DEGREE PROGRAMS SPONSORED
BY THE CARNEGIE CORPORATION

OCTOBER 15-17, 1975
SAN FRANCISCO, CALIFORNIA

PREFACE

Editors are expected to place their special mark on what they edit, even proceedings. Perhaps fortunately for the reader, written presentations were prepared for most of the sessions of this meeting, but unfortunately, much of the free flow of discussion stimulated by these papers and the panel presentations was lost due to insensitive microphones. This provided the editors of this document with little latitude to influence through omission, interpretation, or clever extrapolation. Nevertheless, we cannot resist the temptation to add a paragraph or two of personal opinion and thus have the last word, or more accurately the first word written last.

Although they have been at all times supportive "friends" and sometime administrative helpmeets in their positions as central staff, the editors have not been project directors of any programs represented at the meeting. But during the past three years they have organized *and* summarized major conferences dealing respectively with general education, the meaning of the baccalaureate and creative change in higher education. Those conferences were designed for the faculty and staff of The California State University and Colleges, a parochial group, but one nevertheless very likely representative of American higher education at large.

The discussions at the San Francisco conference reveal a sameness of dialogue heard at those meetings. This is not surprising since the time-shortened degree proposition clearly raises the larger question of the meaning of the degree and its subordinate questions of the purposes of general education as well as the integrity and value of the discipline-based major. When we talk of shortening we must immediately concern ourselves with that which we are shortening.

Moreover, the sameness of dialogue seems to suggest not a lack of imagination, but rather a profound and continuing dissatisfaction with the undergraduate education program offered to most students in most of our institutions. There does seem to be a real search for some new solutions. Steady or declining states of institutional finances and enrollments, however, make change seemingly all the more difficult and only increase the dissatisfaction the more.

This is not to discount the real worth of continuing such meetings. Though themes recur and frustrations are repeated, these exchanges serve an important purpose of keeping the dialogue of dissatisfaction alive. If this dialogue should cease, then no doubt we would be complacently done for.

The inertia of past practice and procedure, coupled with the great size and complexity of the higher education enterprise, makes it difficult for other than marginal changes to be made, or even contemplated. Alden Dunham's call to rethink kindergarten through baccalaureate programs may be beyond our capacity. Yet by working on the margin some major changes will slowly take place. The San Francisco conference included representatives from twelve institutions at which at least some broadening of student options has taken place. And this broadening of options has been done with a rationale and in terms of a deliberate plan rather than in reaction to a crisis situation.

Although we can take pride in seeing projects and programs such as those represented succeed in terms of increased student options, and while we can truthfully say they have contributed to the search for the meaning of the baccalaureate, there may be a tendency to give short shrift to the time-shortened proposition.

Some of the Carnegie-sponsored projects have demonstrated that the three-year degree (or a shortened degree at any rate) is a reasonable proposition. Yet JB Hefferlin in his summary expressed some dismay that comparatively few speakers at the meeting were adamant proponents of the idea. The point is well taken. We suspect that in the pursuit of the quality baccalaureate and the dialogue surrounding that pursuit, the time-shortened dimension is often forgotten or considered incompatible. Certainly the conference proceedings suggest that there is too much disagreement over the meaning of the baccalaureate to arrive at any conclusion about any specific length of time spent to attain it.

Some will argue that colleges and universities are impervious to demands for change from society; however, in great measure they are amazingly adaptable institutions. The marketplace of student demand is the prime agent of change. It is this agent of change which will very likely lead not only to increased options, but options which have the effect of time-shortened degree programs on the student's own terms. The adult student, who as Lee Medsker points out is now in the majority numerically, is typically seeking certification and specific competencies. He or she has little time to spend on redundant and unproductive course work. Thus, time-shortening, though not necessarily on the three-year, full-time student model, is a very real concern to many of higher education's clients. The rapid increase in the number of students taking CLEP examinations very likely reflects this interest.

The question is not if time-shortening will ever be adopted universally by higher education, but whether time-shortening will occur solely on the student's initiative or will occur within a planned and rationalized framework. It is true that some of the twelve Carnegie-sponsored projects reflect limited student interest in time-shortened degrees. But against this must be weighed evidence that many students of all ages seek to accelerate programs by their individual decisions and actions. The high school senior who takes courses in a community college, the adult who seeks credit by examination, and the individual who enters programs where credit is granted for experiential learning are, in their own way, attempting to meet their educational objectives as expeditiously as possible, while resisting the traditional sequences of courses organized on a calendar basis.

As many of the San Francisco conference participants pointed out, "time-variable" is perhaps a better term than "time-shortened". But in adopting the time-variable notion as our purpose, there is the danger of avoiding the real challenges inherent in the time-shortened degree proposition. In short, the concept of time-shortened degree programs should remain a major theme in the dialogue of dissatisfaction.

* * * * * * * * *

The conference would not have been possible without the very good advice of the planning committee which included Armand Burke, Charles Evans, David Provost, DeVere Pentony and Thomas Watts. DeVere Pentony and George Gibson from San Francisco organized a superb meeting including instructions on how to get from here to there.

Lastly, we are especially in the debt of Alden Dunham and the Carnegie Corporation for making the meeting possible.

John M. Smart
Toni A. Howard

AN OVERVIEW

In the following pages are printed the major papers and presentations of the third in a series of meetings of project directors of time-shortened degree programs sponsored in part through grants by the Carnegie Corporation.[1] JB Lon Hefferlin, after listening closely to three days of discussions and influenced by a recently concluded World Series, concluded that in regard to the twelve programs represented, the score clearly is twelve for the Carnegie Corporation and zero for the forces of ignorance. But, he continued, the score is one to 11, time-shortened degree programs versus time variable degree programs. However apt this conclusion, the game, most should agree, is not entirely over.

Major sections of the program were organized to consider the soundness of several hypotheses which appeared to undergird the recommendations of the Carnegie Commission report, *Less Time, More Options*, concerning time-shortened degree programs. These were presented to program participants in the following words:

- Review and reconstitution of programs, especially those in general education, leads to time-shortening without sacrificing quality.
- Accreditation of high school work, advanced placement, summer bridge programs and concurrent high school/college enrollment can lead to time-shortening without sacrificing educational quality.
- Increasing options to students such as assessment of outside experience and challenge of course work can lead to time-shortening without sacrificing educational quality.
- Significant student interest in time-shortened degree programs will be demonstrated to encourage their continuance.
- Public policy makers will encourage the concept of the time-shortened degree program.

"Prediction, Performance and Promise" was the meeting's theme and it provided the basis for the conclusions reached by the project directors concerning the five stated hypotheses. The wide-spread student interest, which some had predicted in time-shortened degree programs, has not materialized, at least not to the extent foreseen. Student performance in the various kinds of time-shortened degree programs is equal to, or better than that of students in traditional curricula. The promise for extending time variable programs is great, though probably not on the strict three-year program model unless of the type which is designed to reduce redundancy in high school senior-level and freshman college courses in general education.

Several model time-shortened degree programs were represented at the conference. They include programs whereby students begin college work while in high school, in some instances by physically attending college during summers or part-time during the final years of high school. In another model, qualified high school teachers present college courses which are approved by cooperating postsecondary institutions. Other types of programs include time-shortening through reduction of general education requirements and the total number of units required for graduation. Still other approaches involve the reorganization of the traditional four-year curricula to permit student acceleration. Such reorganization is typically coupled with alternative methods of learning such as independent study, credit by examination, contract programs, andself-paced modularized courses.

[1]The first meeting, held at Bowling Green State University, is summarized in Richard C. Giardina, James L. Litwin, and Paul G. Cappuzzello, *The Dynamics of Baccalaureate Reform*, published by the Modular Achievement Program, September 1973. The second hosted by State University College, Brockport, is summarized in Armand Burke, *A Second Look at Baccalaureate Reform*, March 1975, available from The Alternate College at Brockport.

Current interest in time-shortened degree programs stems in large part from the Carnegie Commission's report, *Less Time, More Options*, published in 1971. Alex Sherriffs, in opening the San Francisco meeting, called it "practical, unlike many reports, with proposals which could result in quality education but with more flexibility in bite sizes appropriate to the individual's life situation, maturity, and state of motivation."

The question of quality education, raised in Sherriffs' opening remarks, was a major theme of the meeting. Addressing the quality issue, Alden Dunham set forth a dilemma facing higher education: "The agenda for higher education for the future is quite clear, namely, better education at less cost. The future of American higher education is going to mean the putting together of antithetical terms: qualitative improvement at less cost." In his view, the varieties of time-shortened degree programs are a good means to better education at less cost. Dunham noted that the plight facing higher education is not understated. After meeting with state legislators from across the country, he said that he had come away "dismayed at the low priority which higher education has on their agenda. There is an antipathy in many instances towards higher education; unless higher education itself takes some very serious initiatives which show the public that it's putting the public interest ahead of special interests, I am afraid that the situation will not improve but will get worse."

The complexities of maintaining quality while seeking to reduce time were pointed out by Richard Giardina. Based on his experience with an intensive, accelerated, general education program, he is convinced that it is possible to reconstitute programs so as to shorten the amount of time it takes to obtain a baccalaureate without sacrificing quality. But certain conditions must be present, Giardina asserted, for he sees a problem in the way in which the student's progress is assessed, both in the traditional context and in the alternative or innovative program: "We must have a firm grasp of what the student should receive from his general education and appropriate criteria and assessment techniques must be developed to measure that student achievement." And, he asked: "How does one evaluate the quality of new curricular programs in general education in the absence of comparable evaluation of traditional programs?"

Evaluating the nontraditional, Giardina continued, will be conducted in terms of the standards of the arbiters of the university curriculum – that is to say, the dominant intuitions about the traditional program. "Evaluators of new curricular programs in general education thus face the prospect of losing, no matter which way the game is played." If evaluation is in terms of measuring skills and competencies different from those developed by the traditional program, then questions are raised why new programs are developing those particular skills in the first place. If, on the other hand, evaluators attempt to use the same instruments to compare the success of both the innovative and the traditional, then the instruments may not be really the best ones to measure attainment of objectives of the innovative program themselves.

Concern with content and quality have led the Bowling Green group from emphasis upon integration of general education to achieve time-shortening to an emphasis on competency-based programs. Such programs, Giardina asserted, are not time bound – time is irrelevant.

How to achieve continued success of time-shortened degrees efforts (and all successful innovations) was a major area for concern to conference participants. Armand Burke stressed the importance of the college setting. He foresees problems for the unique program in a large university and in a small conservative liberal arts college. "But," he observed, "if you are in a large undergraduate liberal arts college which has a track record of educational entrepreneurship, a readiness for change, I think you can move these programs." He and other project leaders cited the need for strong administrative support for program success. A unit established separately from the larger institution has its problems in continuation. As one conferee put it, "three years ago many of us took the tack of going off on our own and doing our little thing, whether a small college or an alternate college. We are beginning to realize that it doesn't make sense any longer. We have got to have an impact on the more traditional faculty, and the only way to do that is not by confronting them and saying here's an alternate program, take it or leave it." The faculty in the institution as a whole should be asked what they think is important in terms of quality, what they want for their students as a whole.

The independent program,even if quite successful in attracting students, may be the first to go in budget retrenchment. Seth Spellman, James Allen Center at SUNY, Albany, reported the closing of their inter-disciplinary time-shortened program in the social and behavioral sciences on the basis that it was not essential to the mission of the university.

Are time-shortened degree programs and other alternative approaches to instruction cost saving? Most agree that the student who does complete a baccalaureate degree in less time than it otherwise might take realizes personal cost savings. This is true whether or not a degree is completed in three years rather than four for full-time student, or five years rather than seven for students attending part-time.

Cost savings to institutions and state government are much harder to identify. Typically, the method of instruction in those time-shortened programs which include curriculum reconceptualization involve modularization, contract learning, team teaching and other "innovations". These methods are seldom less costly in terms of faculty time – the key factor in the costs of education.

Indeed, as Tom Colahan of Geneseo pointed out, in State supported colleges there are monetary incentives for students to remain in courses because of low tuition and financial aid. Time-shortening must deal with the "1,000 year student" as well as the three-year accelerator. The institution and its faculty may also have the tendency to prolong the educational process in order to encourage higher levels of F.T.E.

Short-term financial impact may appear more costly rather than less costly in some instances, John Shea noted. Students in some time-shortened programs take fewer large enrollment courses in lower division general education and move more rapidly into upper division, traditionally smaller enrollment classes. At a given point in time, therefore, a college may experience a shift in F.T.E. from less costly courses to those which are more expensive to mount.

Thomas Watts and DeVere Pentony, drawing from the experience of their respective campus programs which emphasize self-paced learning as a method of time-shortening, challenged the group with "one-liners". These included:

- The carryover from one time-shortening option to another is likely to be significant.
- Inquiry into prospects for shorter time demands a careful look at the desired learning outcomes of an undergraduate education and a creative examination of new teaching strategies.
- Under present circumstances the three year degree is eminently reasonable.
- Those options which enrich the quality of higher education are not likely to be shortening.
- Faculty will resist conversion to three year degrees.
- Students are not interested in three year degrees.
- Self-pacing leads to self-postponing.
- Credit for non-collegiate instruction is excused learning, not enhanced learning.
- Students leaving high school today may be more widely informed while not being further advanced academically.

Lee Medsker addressed the latter issue of the qualifications of the high school graduate. He noted that the division between high school and college has always been arbitrary and one that doesn't necessarily conform to the increasingly early social and intellectual maturation of young people. "Whether high school

graduates are better prepared or not, they are just different kinds of people than they once were." Noting the great overlap between high school and college work, he observed that an effort should be made to recapture the significance of the final uear of high school for many students.

Are state legislators and state coordinating boards interested in encouraging time-shortened degree programs? According to a survey conducted by Jack Smart and Charles Evans, the record in most states shows little encouragement to the idea. A poll of legislators in five states and heads of coordinating boards across the country disclosed, however, positive attitudes toward the idea, particularly when involving credit by examination, concurrent enrollment in high school and college programs, and redesigned curricula. Greatest opposition was found toward reducing high school graduation requirements and deleting one year of general education, despite the fact that some model programs use this approach. Results indicated most significantly that the state leaders thought time-shortened degree programs would be of greatest interest to adult students, even though existing programs are primarily geared to the traditional college-age population. Most statewide coordinators do not foresee cost-savings from time-shortening; legislators were somewhat more likely to expect such results, though not to the extent expected.

Barbara Chrispin presented to the conference a report on the CSC, Dominguez Hills Small College program which emphasizes curricular reorganization coupled with alternative learning activities, especially a thematic project and experiential learning. Evaluation of the Small College, which has been in operation three years, shows that by individualizing instruction, student acceleration towards the baccalaureate can be facilitated, and students who choose to do so can, and do, complete their degree in three years. The evaluation also shows, however, that the majority of students will take longer than three years. The program has resulted in students being able to increase their student loads progressively throughout their time in the Small College. Among the 19 graduates to date, the average number of units completed per quarter was 22.98. On the average the typical student will begin the program completing 15 units per quarter in the first year, increasing to 17.8 the second, and 18.9 the third.

Robert Bersi reported on 73 programs he first contacted in 1972. Eleven of these programs have since ceased operation. Lack of students, faculty support, poor planning and institutional commitment were the commonly cited reasons for closing down the programs. Most of the terminated programs were in small colleges with less than 2500 student enrollments. Less cost to students in terms of fees and time spent, and the avoidance of general education programs, he reported as being the primary motivating factors for student interest in the operating programs.

The real meaning of the experimentation? – The meaning of the baccalaureate. And this, said John Morris, is really the question which the Carnegie-sponsored Projects and others have addressed.

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AN OPENING

---David H. Provost

It is my distinct pleasure and honor to welcome you to this conference, the third conference on Carnegie Time-Shortened Degree Programs. Some of you were present at Bowling Green, for the first, others made it to Brockport for the second. For a number of you this is the first time at one of these sessions, and we of The California State University and Colleges are very pleased that we have the opportunity to welcome you. I want to thank at this point Alden Dunham, about whom you will hear much more later, and the Carnegie Corporation for their agreement that we use the remainder of the funds in the CSUC Carnegie grant to assist in putting this conference on.

You will be hearing a good deal about time-shortened, time flexible, or three-year degree programs, and I am not going to take your time with any extended preliminaries here. Suffice it to say that this movement has had a major impact on thinking about higher education, and in particular has caused us to deal with some of our preconceptions about what higher education is all about. This is a topic that we very often don't think too much about. We feel that we know all about it, but when we are challenged, we aren't quite sure what to say. We must consider what is the meaning of the baccalaureate? What is the role of general education? What part does career education have to play in higher education? And for that matter, what are the most appropriate uses that we may put the resources that we have available to us in higher education?

In some sense this conference is retrospective. What was intended at the outset of the programs? What have been the developments, including changes in objectives along the way? Where are we now? Leaving the retrospective for the moment for a bit of futuring, where do we think we are going? Is time-shortening an idea whose time has come, or is it a ripple rather than a wave of the future, appropriate for a few but not for very many? This meeting, in all probability, will not answer those and other appropriate questions despite the talent we have collected in this room. But it is our hope that out of it will come a better understanding of where we are, where we are going, and perhaps most important of all, why.

AN INTRODUCTION

—Alex Sherriffs

It has been almost five years since the publication in January, 1971, of the Carnegie Commission on Higher Education's special report, *Less Time, More Options*. This, as we all know, is an insightful, provocative, and realistic analysis of the then and I suggest present state of higher education. It included some sophisticated suggestions for overcoming many dilemmas, most of them still present. Its proposals were practical, unlike many reports, and ones which could result in quality education but with more flexibility in bite sizes appropriate to the individual student's life situation, maturity, and state of motivation.

The report recognized that financing of both public and private higher education would be difficult in the future. There are people around who didn't accept that. The suggested approaches to cost-effectiveness did not compromise quality. They are recommendations for year-round operation which, on the one hand, would reduce the need for new construction and, on the other, make educational opportunities available more of the time. The suggested Doctor of Arts degree would not only be less expensive than a research Ph.D., but would upgrade both the quality of teaching and the status of the teaching faculty. As a matter of fact, it was a Doctor of Arts degree that first got me to be aware of Alden Dunham, and once aware, I began to read anything that occurred in relation to his name. A three-year degree option has obvious cost savings and would reduce the serious problem of boredom for many of our better students – students that we seldom talk about any more. Granting a certificate or a degree approximately every two years, as was suggested, as a symbol of achievement, should encourage stopping out, which in those days seemed like a good idea. It would keep the student more aware of his progress and would be gratifying to him. However, in these days of the vanishing FTE it seems a threat.

Yes, there is wisdom and abundance in *Less Time, More Options*, but to what extent this wisdom will be translated into actual change in our institutions is the question. The answer lies obviously with faculties, with administrators, with the general public, with the government more and more, and with governing boards of our colleges and universities, perhaps less and less. How ready are these parties for change? Is the climate such that change would be constructive?

Let me remark on an implication of the several reports of the Carnegie Commission and of other writings, for example, of Professor David Reisman, Alden Dunham himself, Lyman Glenny, Martin Trow, Gene Lee, Frank Bowen, Paul Dressel, Lee Medsker, and so on. As much as representing an improved climate for discourse, these publications' appearance is all the more significant when we remember the many decades during which those in universities studied almost everyone but never themselves. Today we can assume that there are members of the faculty on most of our campuses who know some of the conclusions within these essays. Fellow professors have been willing to stand up and criticize constructively and dispassionately the status quo in higher education from an academic and not a political point of view. It has strengthened the will of many individuals who had erroneously felt very much alone. Now, when major changes in higher education are more possible and more necessary than at any time since the turn of the century, we somehow must work together to give our governing boards some right to survival. We must ask them to show some initiative or face the fact that others will fill the vacuum created by institutional inertia. And those others could do and are in some cases doing irreparable damage. Those most likely to enter the void, and they are well on their way already, are agencies of government which have important roles indeed, but the determination of educational policy should not be one of these roles.

The people of our society, when they chose to remove educational governance from the political arena, understood and recognized, many years ago, the danger of government in educational policy and in the choice of who is fired and hired as faculty and administrators. Despite the frustration one gets from governing boards, I see them as our only hope to some kind of salvation.

Bringing us to today, the generous grant (and I am speaking ethnocentrically for The California State University and Colleges) of the Carnegie Corporation to our system has helped us to explore educating and learning more actively than we otherwise could have. Three programs were developed at San Francisco, Dominguez Hills, and Bakersfield; and they have shown us a great deal. The inspiration of Alden Dunham, the inspiration of that Carnegie grant and what it caused to be possible led in many ways to the State of California providing our system in a very short number of years five million dollars to do more of the same. This program has funded itches that needed to be scratched of hundreds of faculty members, vicariously or directly. It has affected directly and indirectly thousands of students. It has caused people who had reacted to the classroom situation by reflex (I won't say by tradition, tradition doesn't bother me, reflex does) to stand back and look a little. We found a faculty that was not only willing, once given some support, but enthusiastic in the pursuit of better ways to educate and to provide opportunities for learning.

I think the processes that have been gone through here are probably of more importance than the truths that have been learned.

KEYNOTE

—E. Alden Dunham

A foundation officer runs the risk of feeling that he is more important than he really is, and the sentiments about the role that I have played are appreciated but they are not deserved. The fact is that the foundations are only as good as the programs that are supported and I, for one, am extraordinarily proud to have been associated with a series of programs which fall under the general term of time-shortened degrees, because I think they are important and, indeed, highly significant.

Since this in many ways perhaps will be the last of these organized meetings, I think it is time that we take stock and see where we have been, where we are, and what the future holds. My message is very simple, and really very brief. It seems to me that *the* agenda, not one of the items on the agenda, but the agenda for higher education for the future is quite clear. Namely, better education at less cost. It has been true that certainly since the Second World War many improvements in higher education have resulted in higher costs. Indeed, cost savings and improvement in education have been antithetical terms, namely, qualitative improvement and less cost. Better education at less cost is the agenda, at least in my view, of higher education.

I will be quite bold and put forward the proposition that as far as I know, and subject to correction in the next day and a half, the best, and I underline "best," means to better education at less cost are the varieties of time-shortened degree programs represented in this room. And if I am right, the conclusion seems to me obvious. The problem before us, before higher education if you will, is how to adopt on a broad scale, the kinds of programs represented in this room.

What about the plight of higher education? Is it really as serious as everybody seems to be saying these days? In my view, yes. I have had the occasion in the past several months of meeting with several state legislators from different states and, in all honesty, I have come away dismayed at the low priority which higher education has on their agenda. Not only is higher education at the bottom or near the bottom of the agenda of state legislators across the country, there is an antipathy in many instances towards higher education itself. I don't understand it completely.

Higher education, in my view, is in very deep trouble. It is in deep trouble with the legislators. I think it is in deep trouble with the public. And as I say, I don't pretend to understand all the reasons. But it seems to be clear that, as Alex Sherriffs pointed out, unless higher education itself takes some very serious initiatives which show the public that it is putting the public interest ahead of special interests, I am afraid that the situation will not improve but will get worse.

In New York City we have perhaps an extreme case of what can happen with the budget situation, though having had nothing directly to do with the low esteem in which higher education is held. (Indeed, I would maintain that probably in New York City, as far as the public is concerned, higher education ranks pretty near the top.)

The kinds of Draconian steps proposed by Chancellor Kibbey may foretell the future for many institutions. They are rather stringent steps indeed: retrenchment to the extent of 20% of students and faculty within the City University of New York; increase of faculty workloads in the four-year institutions by about 20%, with a somewhat corresponding increase in salary to go along with that; and, I think this is obviously relevant to this meeting, he has called for an acceleration of student programs through the bachelor's degree – all in an effort to save money.

Higher education is in trouble. It is in severe trouble, and money cannot be ignored. We as educators like to think that money is somebody else's responsibility. We think of loftier things. But money is very definitely going to be at the heart of many of the problems for the future. You are probably aware that there is a body of literature now being developed which shows, for example, the degree to which the differential

between the incomes of high school graduates and the income of college graduates is shrinking. I would maintain that the more that this fact becomes known to the public, the greater the problem will be, and the more the impetus will be to cut the economic costs of students and taxpayers given that situation.

If quality education at less cost seems to be the goal for higher education in the future, how to bring it about is the problem. When we were involved with the creation of the dozen or so time-shortened degree programs represented here, certainly it was on my agenda that this indeed was the goal: better education at less cost. The Carnegie Corporation has spent about three million dollars on grants to institutions, many of them represented here, and roughly another million dollars in grants for the support of examination programs, specifically CLEP, which I would include as part of the program which we are talking about. The grants covered a variety of things. Several institutions' programs were funded having to do with basic changes in the college curriculum leading to shortened degree programs. There were several programs represented here having to do with the relationships between high schools and colleges, another means of getting at the question of revamping the curriculum and smoothing the way toward college graduation.

My impressions of these programs over the past three years or so are roughly as follows. First of all, I think that in very important ways these programs opened up vital debate about the meaning of the bachelor's degree. I remember the discussion at the Bowling Green conference. What did the bachelor's degree really mean? I think much of that debate is valuable, and needs to continue. Second, I think these programs have opened up an area which has been hitherto closed for discussion with a kind of an iron curtain drawn between, on the one hand, high schools and, on the other hand, colleges. I think a healthy interchange has come about as a result of many of the programs represented in this room. I, for one, see as probably the most fruitful avenue for future work the increasing exchange of ideas and programs between high schools and colleges. The third area which I think has been affected by the grants is the matter of how to go about bringing change within a campus or among campuses within higher education as a whole.

If what you have been about these past three years is important, how do we spread the idea? With regard to the value of the programs themselves, if you say the goal is better education at less cost, at least I would say that's one way of expressing my goal. On the education front, as I talked with many of you over the past three years, and as I have seen your reports, it seems to me quite clear that the quality of the education of the students has been at least maintained, if not improved. I think that's quite clear from what I have heard. On the cost side, I gather that the situation is not all that clear, particularly since it is difficult to disassociate the startup costs from ongoing operating costs. But it is obvious that to the student cost and tuition is there – the cost savings in tuition is there. To the taxpayer there ought to be a cost savings in terms of the degree. The problem comes to the institution, the cost to the institution in terms of FTE is not likely to go down unless you can maintain or, indeed, increase your enrollments – and that obviously is a problem today.

On the problem side, I gather, subject to correction over the next two days, there are essentially two problems. One is students. Today not too many students are very anxious to get out into that cold world where there aren't that many jobs. Therefore, the recruitment of students into these programs has not been as successful as many had hoped. I think, at least I would hope, this will be a transitory problem. Some predict that by 1980 the economy will have turned around, and that given the demographic shift we are going to have, there will be a sudden reversal in the surplus of labor with a shortage of labor. The result will be that jobs are going to be very, very plentiful indeed. The motivation for students to stay protected, if you will, insulated from that cold world out there, will no longer be present. That's a hope. On the faculty side, I suppose that the main problem as always is that faculty members don't want to do something that is somehow different. That's the main issue. And indeed, when they begin to realize that the implications of time-shortening may lead to fewer students and less money from the state, they feel threatened. Their jobs are threatened, and this is an obvious and natural fear.

There is a tough question to be raised at this point: whose interest is to be served? If it can be shown that better education can be had at less cost through some kind of time-shortening, the issue becomes whether the public interest is greater than any special institutional interest.

For the next steps, assuming that what I have said is more or less accurate and that these programs have on the whole been successful, we have to figure out strategies for change throughout higher education so that time-shortening becomes the major agenda for higher education as the means toward better education at less cost.

Indeed, I have talked to Chancellor Glenn Dumke about my own radical notion. I am convinced that a full year can be saved out of elementary and secondary school for the typical student and another year could be saved out of college graduate experience. My radical notion is that if in a state like California, for instance, or New York, the educators at both school and college level were to get together and boldly attack the notion, they might indeed cut two years out of the entire educational spectrum for the typical student, grades K through AB degree, saving billions of dollars en route, and in the course of so doing drastically revise the entire curriculum throughout all of those grades. In such a bold initiative I think educators could do more to recapture public confidence that they are serving the public interest rather than their own interest than any other single thing that they might undertake.

THE QUALITY BACCALAUREATE MYTH

—Richard C. Giardina

1. **Review and Reconstruction of Programs, Especially those in General Education, Leads to Time-Shortening without Sacrificing Educational Quality**

What is the problem? The problem is a basic one: In order to deal with this hypothesis underlying time-shortened degree programs, one must first determine what constitutes the generally or liberally educated individual at the baccalaureate level. This determination of *objectives* will give us *criteria* with which to gauge "educational *quality.*"

As you can well imagine, age-old questions are constantly being raised in regard to the above: Does baccalaureate general education draw its meaning from the exposure of students to the "cumulative wisdom of the ages," assuming that such an exposure will fundamentally alter the thinking content and processes of the individual so that he will relate both to himself and to his environment in a more meaningful, productive, and satisfying manner? Alternatively, should baccalaureate general education take as its rallying cry the notion that there exists generic competencies – call them general life skills or basic human capabilities – that can be developed in the individual through addressing them *explicitly* in the curriculum?

Of course we know that the "cumulative wisdom of the ages" can be utilized to develop precisely those generic competencies which are deemed important. Unfortunately, general education has very often been couched in dichotomous exposure vs. skill development terms. What I am suggesting here (and indeed what is suggested by the entire thrust of Bowling Green's endeavors) is a redefinition of general education in terms of generic competencies, followed by a structuring of curricular programs and alternative learning experiences to develop those competencies through the utilization of appropriate knowledge content. Thus redefinition prior to implementation is the key, as it involves the recasting of general education in the light of generic learning outcomes.

It follows from the above that we must attempt to ascertain what those learning outcomes are, and to develop satisfactory criteria and assessment mechanisms so that we might judge whether the outcomes have been attained. Assessment in accord with selective criteria thus becomes the final arbiter of success. One must not only know the skills one is attempting to develop, but basic tenets of critical inquiry demand that one also attempt to find out how well one has succeeded. It is thus impossible to talk about efforts to shorten the baccalaureate without asking a number of hard questions concerning how well the student has performed. But more on this later.

Once an institution has determined what type of individual its general education program should cultivate, it should be possible to structure a general education curriculum, or indeed a set of alternative general education curricula, which will help all students attain the same set of generic capabilities at a minimally acceptable level. If a goal of general education is the development of critical thinking skills, one can probably develop a curriculum which will accomplish this (as we think we have with our own Little College). If a goal of general education is an understanding of the sweep of American history from colonial times to the present, one can probably create a curriculum which will do that. It is in fact conceivable that the same curricular program can develop critical thinking and an understanding of American history simultaneously!

I am convinced that it is possible to reconstitute programs in general education in such a way as to shorten the amount of time it takes to attain a baccalaureate degree "without sacrificing educational quality." But, to reiterate what I've said above, one can do this only if certain conditions are met: a) one must have a firm grasp of what the student should receive from his general education, and b) appropriate criteria and assessment techniques must be developed to measure student achievement. These conditions are more easily stated than realized; but they remain essential if general education is to be streamlined and quality assured. However, with this said, our problems are only beginning!

II. How Can the Baccalaureate be Shortened without "Short-changing" General Education?

Of the twelve institutions which have received funding from the Carnegie Corporation to experiment with various approaches to time-shortening, it might be useful to single out four which are attempting to accelerate the baccalaureate program through a restructuring of the general education curriculum: SUNY-Brockport, California State College, Dominguez Hills, the University of Illinois, and my own institution, Bowling Green. I am certain that by the end of this conference the four institutions in question will have had ample opportunity to say their piece and show their results. However, it may be useful to point out here some salient features of the four programs in question.

Both Brockport and Dominguez Hills have created new colleges; in the former case, the Alternate College, and, in the latter, the Small College. These two colleges have started basically from scratch in redefining the baccalaureate and the general education portion thereof. Since these experimental colleges offer their own degrees, they can be pretty much the arbiters of what does or does not go into them. Both have had a good deal of success in developing alternative curricular programs attractive to a certain portion of their institutions' student populations and in shortening the baccalaureate in the process.

Unlike Brockport and Dominguez Hills, Illinois and Bowling Green have not established separate colleges, but rather have attempted to influence the baccalaureate program offered by the larger institution. Both have attempted to develop curricular models which would be acceptable to the larger institution to meet the more traditional baccalaureate norms. Both institutions attempted to establish a core general education curriculum and to restructure baccalaureate requirements. Bowling Green sought to substitute "outcome" requirements for those "exposure" requirements already established.

Since I can't speak to the success of the Illinois venture, I should put a word in here about Bowling Green's successes and failures. While we have established a number of curricular programs in genera education (i.e., the Little College, Humanities Cluster, Science Cluster, Environmental Studies Cluster, International Studies Cluster, French Cluster, and German Cluster Colleges), we have found that our students are likely to switch back and forth from the alternate to the more traditional curriculum. It is thus that we recently decided to discontinue any attempt to link the alternate curriculum with the possibility of a shortened degree. Now any freshman is eligible for any of our curricular programs; and any freshman is eligible for our time-flexible degree option. The option is now based not upon participation in a particular curricular venture, but on performance vis-a-vis a set of criteria which define our expectations of general education. These criteria presently include critical thinking capability, facility in oral and written communication, and a basic and broadly based set of understandings in the humanities, the physical sciences, and the social sciences. They also include one other criterion imposed by the larger academic community: an acceptable grade point average in freshman coursework. This last criterion is a perfect example of compromise which may become necessary in attempting to reconcile differing faculty expectations concerning what is or is not important in higher education.

There is no doubt that all four of the above-mentioned programs have attempted to place emphasis upon the importance of general education within a redefined, restructured, and shortened baccalaureate. The question of what happens to educational quality in the process is one still to be addressed. However, before I do that, permit me to summarize from my own experiences at Bowling Green. I am firmly convinced of three things in regard to the problem of articulation between a time-shortened degree program and the established baccalaureate curriculum. The first is that whatever problems exist are heightened when the program in question has neither its own degree nor its own degree requirements. Secondly, the problems are compounded when students are permitted to switch freely from the alternate curriculum to the traditional one and back again.

The third is that it is probably more advantageous for faculty at institutions such as Bowling Green to devote their attention first to questions of competency definition and competency assessment and

only afterward to the development of curricular programs and optional learning experiences which students can then utilize to master the competencies which are thought to be important. It is thus that Bowling Green's new Competency-based Undergraduate Education Center is turning its attention first and foremost to definitional and judgmental questions regarding the generic competencies of general education.

III. The Evaluation "Straightjacket"

It's very easy to say that general education should assess student attainment of a set of generic life skills. It's not so easy to define what those life skills are or to determine how to assess attainment. Of course, there is some agreement as to the nature of those skills. Everyone speaks of critical thinking, communication, problem-solving, decision-making, value clarification, and information retrieval. But the real questions are: how much do we know about those skills; how important is each of them in relation to each other; is there an appropriate sequencing of skill development; does attainment assure retention; are certain learning experiences better in terms of student learning outcomes than others?

These questions are merely the tip of an immense iceberg of what we don't know about types of skills needed to perform functionally in a complex and a rapidly changing society. In a sense, every time we develop a curricular program, we do so in a vacuum, for we don't really know if the skills we are developing in that particular program are worth developing in the first place. We go by hunches and intuition and by some sixth sense concerning our particular "anthropological vision" of man. The primitive nature of our understanding both of important generic competencies and of how to assess their attainment with a high degree of predictability is a problem faced by any educator attempting to "make sense" out of general education.

Assuming that a number of the time-shortened degree programs have a basic understanding of what it is they are attempting to achieve in general education and have some notion of how to assess attainment, there is no similar assurance that the more traditional general education programs possess any basic understanding regarding either. The problem is really very simple: how does one evaluate the quality of new curricular programs in general education in the absence of any comparable evaluation of traditional programs?

Take the situation we found ourselves in at Bowling Green. The question was continually raised as to whether the Modular Achievement Program was preparing students to meet the same standards as those demanded by the traditional curricula. We were constantly asked to see to it that our evaluation endeavors demonstrate this. The problem we faced was that of discerning what the traditional curriculum sought to accomplish, and whether our curriculum was accomplishing the same things. The situation is somewhat analagous to the blind man attempting to assure that his date is as pretty as he is handsome, and equally presentable, without the use of a third party whose standards both will agree to accept.

Whenever a situation such as the above arises, the new program, no matter what the character of its evaluation strategies and outcomes, will be judged by whatever standards the arbiters of the University curriculum feel are appropriate; that is to say, by whatever the dominant intuitions are concerning what the traditional programs are presently accomplishing. One dominant intuition is that grades are important in this regard. Thus one can well understand the concern at college campuses across the country over the problem of "grade inflation." If student grades are getting better, then by definition the faculty is doing its assessment job poorly. A contradiction arises here in regard to new programs, since poor student grades in the new programs will cause some faculty to question the viability of those programs, whereas good student grades will arouse suspicions that the new programs are "easier" than the more traditional ones.

Evaluators of new curricular programs in general education thus face the prospect of losing no matter which way the game is played. If they suggest that their evaluation techniques are measuring skills and competencies different from those developed by the traditional programs, then the question of why these new programs are developing those particular skills and competencies in the first place is raised. If the evaluators attempt to utilize the same instruments to compare success of both the innovative and the traditional programs, the instruments utilized may not really be the most appropriate ones to measure attainment of the objectives of the innovative programs themselves. In either case, the evaluation situation becomes untenable. Faculty in the traditional programs hold the upper hand by saying: "We want you to evaluate what we're doing and then to show us that you can do it better."

In a favorite quote of mine, Kenneth Boulding states:

> We must reexamine the whole process of formal education from the point of view of what is the minimum knowledge, not the maximum, which must be transmitted if the whole structure is not to fall apart.[1]

What I think he is saying is that at a minimum a baccalaureate program can be held responsible for the development in students of a set of skills adequate to enable them to function in society, and thus to enable that society itself to function. While baccalaureate programs should be expected to do more than this, in terms of encouraging students constantly to reach their highest potential, we cannot fail to graduate a student who has not reached that "highest" potential. We should, however, be able to withhold graduating that student who has not reached the lowest potential deemed acceptable by the institution.

Building's definition of "minimum knowledge" has built into it a concern for the minimum ability needed to enable the individual to reconstruct the "maximum" on his own, so that he may optimize his participation in society. In this sense, "minimum knowledge" becomes the ability to generate new knowledge as the need arises.

A statement one hears from some faculty members is that, if certain students can do in three years what others normally do in four, we ought to keep the former an extra year in order to demand more of them. A variation on this theme is one which suggests that if certain students can reach particular levels of achievement in three years, then those levels, by definition, must be too low. Thus we should raise those levels for all students, rather than allow some to attain "low" achievement levels more quickly.

Such arguments sanctify the four-year degree to the extent to say that students ought to be kept in college for four years and that the more that can be "crammed" into them in that time the better. Implicit in this notion is the reverse which says that, after a student has spent his four years, he should receive his degree no matter what he has or has not learned. Either side of the coin appears to ignore ompletely the Boulding dictum quoted above.

I have no argument with a student staying in college as long as he wants to. In fact, a number of Bowling Green's accelerates have stayed on for a fourth year in order to take part in an off-campus experience, a program abroad, an internship, a dual major, or one of a number of "enrichment" opportunities available to them in diversified curricular fields. All of these activities are indeed meritorious, and one should encourage as many students as possible to take advantage of them. However, there is a difference between encouragement and demand. One should *demand* that students attain those minimum general and specialized skills which have been agreed upon as important. One should *encourage* them to do more than that. But students, like poets, have miles to go before they sleep. Decision-making regarding enrichment must be theirs and theirs alone; decision-making regarding minimally acceptable capabilities is ours to make as faculty. One thing about attempts at time-shortening is that they force us to make some of these basic distinctions and to make decisions on the basic of those distinctions.

IV. The Quality Baccalaureate Myth

One myth perpetrated by the Carnegie Commission in all its voluminous reports is that there is out there somewhere an already-defined quality baccalaureate. To suggest that one can under certain circumstances obtain the baccalaureate degree in less time without sacrificing educational quality leads naturally to the assumption that there is quality in the first place – quality which is both demonstrable and measurable. The Commission further implied that there were standards of excellence that those attempting to shorten the baccalaureate would have to continue to meet.

The Carnegie Corporation then granted a number of institutions sizable sums of money to perform this feat. Bowling Green, in creating what we "believe" to be a quality approach to a time-shortened baccalaureate (and with data which purport to show this), thus considers itself to have been successful in carrying out the letter of the grant which we received. However, we cannot pretend to have carried out the spirit of the grant, because to have done so would have meant comparing the quality of our alternate general education program with the quality of the traditional one. Since we have very little understanding of what general education as presently constituted at most universities signifies, any comparative analyses are doomed to failure before they begin.

The Carnegie Commission may have assumed standards of educational quality, but it had little reason for doing so. If nothing more, the various time-shortened baccalaureate programs around the country have clearly indicated the need for such standards at their respective institutions. Our understanding of the nature of the baccalaureate, and especially of its general education component, is so fragmentary and rudimentary that any judgment about the educational quality sacrificed through time-shortening would be misplaced. Our various Modular Achievement Program Reports show that our accelerated students are doing well, if one defines "grade point averages" and "graduation honors" as doing well. They may also be doing well in other ways which we think are important; but the arbiters of the traditional baccalaureate are not really interested in that type of information. The grade point standard waves on.

V. In Search of a Quality Baccalaureate

To give credit where credit is certainly due, the Carnegie Commission reports and the Carnegie Corporation funding have proven invaluable in forcing a number of educators around the country to come to grips with the components of a quality undergraduate degree. Resulting time-shortened degree programs have led to a "re-conceptualization of the meaning of the baccalaureate."[2] As Charles Meinert has put it: "The subject of time-shortened degrees is but a part of the larger issue of the direction contemporary education should take .... Although the phrase 'time-shortened degrees' may disappear as a popular topic or focus of concern in higher education, many of the pressures, concerns, and responses associated with the subject ... will remain significant educational issues for the remainder of this decade and beyond."[3]

Since I cannot speak directly to how other institutions around the country have dealt with the dilemma I have posed in this paper, I will attempt to address Bowling Green's response. We look upon our grant from the Carnegie Corporation and the endeavors occasioned by that grant as the direct impetus behind our proposal to the Fund for the Improvement of Postsecondary Education. This proposal called for the creation of a Competency-based Undergraduate Education Center (CUE) to ask some serious questions concerning what determines quality in a baccalaureate program at the general education level.

In fact, it was precisely because we saw the quality question as an irresolvable one, given the dichotomy we had posited between the traditional and the "modular achievement" programs, that we found ourselves going in a direction defined neither in traditional nor in alternative educational terms. In fact, our new emphasis on competency-based education will lead to new approaches having little similarity either with the traditional programs or with the innovative ventures we have pursued thus far.

As a result of the lack of clarity regarding what constitutes a quality baccalaureate, we have had to redesign our own dynamics of exploration and experimentation. This redesign has demanded a reconstitution of the problem articulated by the Carnegie Commission regarding time-shortening without sacrificing educational quality. We have had to come up with our own tentative definitions of quality in terms of objectives, criteria, implementation, and assessment. We have had to turn to our faculty, both the more traditional and the more innovative, and hit them *both* squarely with the quality issue. Thus, the recently created University Division of General Studies and the CUE Center have announced to all concerned that our aim is to initiate a sophisticated dialogue regarding the goals and objectives of general education in terms of learning outcomes.

The University Division, because of its university-wide mandate to help improve the quality of general education on the Bowling Green campus, has been able to utilize its position to address the quality issue as it applies to all programs, both traditional and innovative. It has done so by encouraging academic departments and programs to stipulate anticipated student learning outcomes. As we do not offer our own baccalaureate degree, the Division can interject the quality issue in the various College Councils which oversee the granting of baccalaureate degrees.

The CUE Center, as a result of its commitment to researching general life skills and developing competency-based models of general education, can draw upon faculty from any realm to aid in its deliberations. Its status as a national center means that it can access educators from all over the country who are concerned about what constitutes quality general education. The CUE Center is attempting, on the Bowling Green campus as well as in the larger academic community, to seek a consensus regarding both the types of skills and the levels of skill development which general education programs should address.

It is hoped that the Division and the CUE Center, working in tandem, will erect cogent targets for general education, around which the subject of quality might finally be raised in some manageable form. Once assessable objectives for the general education mission are set, they should provide a set of criteria by which the efficacy of both innovative and traditional programs can be measured. Wherever this venture ultimately leads, one can credit the Carnegie Commission and the Carnegie Corporation with having acted as a major catalyst for an all-out thrust toward making sense of the quality issue in baccalaureate education.

As I have said in a paper originally written for the first annual conference of this group: "Perhaps the problem with the baccalaureate is that it is rarely seen as problematical; and perhaps attempts at shortening it will have the very salutory effect of casting undergraduate education in that most desirable light."[4] I believe that our three years of experimentation both individually and collectively, together with the directions we now intend to pursue as a result of those three years, have brought us and higher education to a point at which we are beginning to see the light!

NOTES

1. Kenneth E. Boulding, *The Image* (Ann Arbor: The University of Michigan Press, 1956); page 163.

2. Office of New Program Development and Evaluation, *The Challenge of Creative Change* (Los Angeles; Office of the Chancellor, The California State University and Colleges, March, 1975); page 38.

3. Charles W. Meinert, *Time-Shortened Degrees*, ERIC/Higher Education Research Report No. 8 (Washington, D.C.: American Association for Higher Education, 1974); page 68.

4. Richard C. Giardina, "The Baccalaureate: Defining the Undefinable?" *Journal of Higher Education*, Vol. XLV (February, 1974); page 121.

THE HIGH SCHOOL COLLEGE INTERFACE AND TIME SHORTENING

—A Panel Presentation

Project representatives from the New York programs addressed the proposition implicit in *Less Time, More Options* that recognition of work in high school for college credit, advanced placement, summer bridge programs and concurrent high school/college enrollment can lead to time-shortening without sacrificing educational quality. Charles Evans in introducing the panel pointed out that several of the New York models were designed to address this proposition. Each of these programs represents in some way an effort to improve articulation between the high school and the college level.

The James E. Allen, Jr., Collegiate Center at SUNY, Albany, admits students at the end of the eleventh grade into a four-year collegiate program. Seth Spellman, Dean of the Center, in discussing the question of quality observed that students in the Center's program while taking the specialized degree program were successfully undertaking and completing course work offered throughout the institution. In this sense the time-shortened program has been accomplished without sacrificing educational quality. Retention rates are similar to those of the university as a whole. When the TSD program was started in 1972, the Center began with 61 students in the initial class. Of the 61 students, 80% remain in college at this point (fall 1975); sixty-one percent at Albany. Of the second class of 140 students, 79% remain in college with 69% at Albany. Of the third class which entered in fall 1974, 95% are continuing. Figures for the university as a whole are roughly comparable. Whether or not time-shortening can be accomplished without sacrificing educational quality is no longer a serious consideration, Spellman concluded.

Evaluation of the Buffalo program, which admits students following satisfactory performance in a summer session at the end of the junior year in high school, has found that student performance in terms of G.P.A. is slightly better than the average incoming freshman who has completed the twelfth grade, reported Wendell Wickland, Director for Accelerated Programs. There is a self-selection process at work, he noted, perhaps leading to better performance. Furthermore, time-shortening is not the goal of most of the students who come into the program. Their motivation is to get into a program which is more meaningful to them than would be the senior year in high school. Students in the program also seem to be more often directed toward the professions than the average freshman.

College-level courses offered in high schools, taught by high school teachers to high school students, have been featured in a cooperative program with three high school districts and State University College, Brockport. Armand Burke, Provost of the Alternate College at Brockport, observed that the quality of the educational program which has some 200 students participating and who will earn six college units on the average is probably as good, or better than, the typical fare in beginning college courses. This is the result of close cooperation between high school faculty and faculty from Brockport. The program, too, has had the benefit of increasing communication between the two levels of education. This program, and others which are similar offered through private colleges, is serving to attract students who ordinarily would not be attracted to a particular institution, Burke continued. There is a quality check, he pointed out, in that it is his belief there is a pride among high school teachers which insures that they will not likely dilute the level of course offerings. Furthermore many high school teachers have extensive graduate course work in their subject – often much more than graduate students found teaching the same courses at universities.

Sarah Looney, director of the 3-1-3 program at State University College, Fredonia, said that Fredonia has addressed the objectives of better education at less cost. The Fredonia program offers up to 12 hours of college credit for carefully screened high school courses, taught in high school by regular high school faculty. In addition the student may take courses at Fredonia – the result being one year less required to complete high school and college. Students taking college courses while in high school achieve significantly greater G.P.A.'s than students who are graduates from the same high schools. To some extent, student success is self-fulfilling in that the students are better academically or are, at least, more highly motivated than the norm. Administration of ETS area tests at the end of two years to program participants and a control group showed no significant difference between the scores of the two groups. On the cost side there

will be a saving to the institution and most clearly to the individual in terms of tuition and other expenses. Finally, about 90% of the original 85 who began the program in 1973 will graduate in June 1976. Three will complete their college work in two and one-half years after high school graduation.

Arthur Walker of Shaker High School, in describing another program in which high school students are taught courses by high school faculty acceptable for college credit at State University College, Plattsburgh and Hudson Valley Community College, said the program began from a concern with making the senior year in high school more important for students with college ambitions and with average to above average academic records. The basis for the program was the fact that students who had gone on to college from Shaker often said that some of their college courses were duplicates of those they had taken in high school. The fact that at the high school teachers teach primarily by grade level, made it appear logical that those teaching twelfth grade work could undertake general education courses at the freshman level. Though developing a program of courses acceptable at all state university campuses was not possible, an arrangement with Plattsburgh and Hudson Valley was. Forty students are in the program (fall 1975). Those that have completed work in the program in prior years have been a major factor in selling the program to their friends.

One problem area in the cooperative program was noted by Ausma Mursch of Hudson Valley Community College. This is the problem of admitting students with advanced standing into a community college – many faculty feel that they have too little time with a student given the two-year program of the community college. Nicolas Troisi, Dean of Professional Studies at Plattsburgh, reported that 6 of the 14 students in the first year of the program at Shaker had come to the four-year campus. Five of the six have done very well academically. One real value of the program, he continued, has been articulation and the rapport built up between high school faculty and those of the college. A better understanding of the level of instruction going on at the high school was the result – faculty were surprised at the advanced concepts and content being taught, in part to meet the stimulus needs of the high school senior.

Recapping the panel, Charles Evans said that from their point of view after having tested a variety of time-shortening modes involving the high school/college interface that quality in terms of student grade point averages and persistence has not suffered. Indeed quality may have been advanced as some students achieve at rates higher than they would be statistically predicted to do so.

RESTRUCTURING THE BACCALAUREATE: A FOLLOW-UP STUDY

—Robert Bersi

The observations and tables included in this report are based upon questionnaire responses of campus administrators currently or recently responsible for the direction of the seventy-three time-shortened degree programs described in *Restructuring the Baccalaureate: a Focus on Time-Shortened Degree Programs in the United States, 1973*. Nearly three years have passed since this national survey of three-year baccalaureate activities was undertaken. During this time many programs have continued to expand and develop; some are maintaining a successful stability; a noteworthy percentage were either never implemented, are no longer operational or expect ultimate phasing out. Of the 54 institutions responding to the survey questionnaire, 44 programs are reported to continue to function with some degree of success.

The information presented below is synthesized topically under six general headings: Institutional Descriptions, Program Status, Program Enrollment, Program Operation, Problem Areas, Interesting Findings. Respondents answered only those questions for which they had available statistics and other information.

1. Institutional Descriptions

Nearly half of the colleges/universities reporting operational time-shortened degree programs were founded before 1875; 40% of the three-year programs no longer in operation were housed in institutions founded between 1950 and 1974. Fifty-two percent of the campuses with successful programs were dispersed among state, regional or local public colleges/universities or private institutions. The majority of operational programs are found in institutions enrolling 5000-9999 students; seventy percent of colleges/universities reporting unsuccessful programs enroll under 2500 students. Most of the time-shortened degree programs are reported in institutions of 250-499 faculty. Generally those programs that failed were staffed by a college-wide faculty of under 100 and housed in institutions granting the Bachelor's degree and below. The largest proportion of the campuses (45.5%) offering time-shortened curricula grant degrees through the doctoral level. Operational programs are housed mainly in institutions accredited by the Middle States and North Central Accrediting Associations. The highest percentage of unsuccessful programs were located in the North Central accrediting area. Most of the reporting institutions list the Liberal Arts and Teacher and Professional Preparation as their major foci. Over half of both the successful and unsuccessful programs are reported by campuses on the semester calendar.

Tables 1A-1H present institutional data cross-tabulated with program operating status.

TABLE 1A. FOUNDING DATA

Founding Data	Operational %	Non-Operational %
Before 1850	22.7	10.0
1850 – 1874	27.2	20.0
1875 – 1899	9.1	20.0
1900 – 1924	11.4	10.0
1925 – 1949	6.8	—
1950 – 1974	22.7	40.0
	99.9*	100.0
	N = 44	N = 10

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 1B. AFFILIATION

Affiliation	Operational %	Non-Operational %
Public: State	52.3	10.0
Public: Regional/Local	6.8	30.0
Private: Church	11.4	30.0
Private: Non-Church	29.5	30.0
	100.0	100.0
	N = 44	N = 10

TABLE 1C. INSTITUTIONAL ENROLLMENTS

Number Enrolled	Operational %	Non-Operational %
Under 2499	27.3	70.0
2500 – 4999	2.3	--
5000 – 9999	36.4	10.0
10,000 – 14,999	13.6	--
15,000 – 19,999	9.1	--
Over 20,000	11.4	20.0
	100.1*	100.0
	N = 44	N = 10

TABLE 1D. NUMBER OF FACULTY

Number of Faculty	Operational %	Non-Operational %
Under 100	15.9	60.0
100 – 249	13.6	20.0
250 – 499	43.2	--
500 – 749	11.4	--
750 – 1000	11.4	--
Over 1000	4.5	20.0
	100.0	100.0
	N = 44	N = 10

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 1E. HIGHEST LEVEL OF DEGREE OFFERED

Degree	Operational %	Non-Operational %
Associate Degree	--	10.0
Bachelor's Degree	13.6	50.0
Master's Degree	41.0	10.0
Doctoral Degree	45.5	30.0
	100.1*	100.0
	N = 44	N = 10

TABLE 1F. ACCREDITING ASSOCIATION

Accrediting Association	Operational %	Non-Operational %
New England	2.3	20.0
Middle States	38.6	20.0
North Central	25.0	30.0
Northwest	2.3	--
Southern	22.7	10.0
Western	6.8	10.0
Regional Accreditation	2.3	10.0
	100.0	100.0
	N = 44	N = 10

TABLE 1G. CURRICULA OFFERED

Curricula	Operational %	Non-Operational %
Terminal Occupational below Bachelor's	6.8	10.0
Two Year Bachelor's Accreditable	--	10.0
Liberal Arts and General	77.3	90.0
Teacher Preparation	90.9	70.0
Professional	65.9	40.0
	N = 44	N = 10

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 1H. ACADEMIC CALENDAR

Academic Calendar	Operational %	Non-Operational %
Quarter	27.3	20.0
Semester	61.4	50.0
Trimester	2.3	10.0
4-1-4 Plan	9.1	20.0
	100.1*	100.0
	N = 44	N = 10

2. Time-Shortened Degree Program Status

Eighty-two percent of the campus officers responding to the survey questionnaire indicated that their respective time-shortened degree programs continue to be fully operational. Eighteen percent of the programs have been discontinued; 11.5% of programs originally planned never reached implementation. Lack of program success is generally attributed to negligible impact on institutional development and change, as well as overall faculty opposition to time-shortening and lack of student, faculty and administrative interest. Other reasons for discontinuation include lack of commitment to the educational value of time-shortening; poor program conception and organization; and lack of qualified students for program enrollment.

Tables 2A and 2B detail data concerning program operation.

TABLE 2A. PROGRAM STATUS

Status	Total %
Operational	81.5
Discontinued	18.5
	100.0
	N = 54

TABLE 2B. REASONS FOR DISCONTINUATION

Reason	Non-Operational %
Never implemented	60.0
Faculty opposition to time-shortening	40.0
Little impact on institutional development	30.0
Administrative opposition to time-shortening	20.0
Lack of faculty interest	20.0
Lack of student interest	20.0
Budgetary cutback	10.0
Resources referred to other program areas	10.0
Change in institutional goals and objectives	10.0
Opposition from other sources	10.0
	N = 10

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

3. **Time-Shortened Degree Program Enrollment**

Current enrollment in the 44 programs reported as fully operational ranges from under 25 students to over 300. The majority of the programs presently enroll between 150 and 300 students. Forty-eight percent report under 74 students currently completing their first year of enrollment; 25-75 students are in their second year; 25-75 in their third year. Most of the programs about which information is available have graduated under 25 students and were implemented with between 25 and 75. Of the operational programs, student academic performance is generally better than that of students enrolled in the regular curriculum of the parent institution. Seventy percent of the colleges/universities reporting time-shortening activities indicate that less cost is a major appeal of their three year baccalaureate. Early entry into the job market and graduate school is another reason students prefer a time-shortened program, as well as the opportunity for self-pacing and independent study, the appeal of a varied curriculum, academic stimulation, and avoidance of freshman general education courses.

About half of the institutions report that the cost to educate students enrolled in their three-year degree programs is about the same as that of the students in the parent college.

Data related to these TSD program characteristics appear in Tables 3A-3G. It should be noted that in many instances institutions were unable to provide information requested.

TABLE 3A. PROGRAM ENROLLMENT FIRST YEAR OF OPERATION

Enrollment	Operational %
1 – 24	20.5
25 – 74	25.0
75 – 149	22.7
150 – 299	11.4
over 300	6.8
No information available	13.6
	100.0
	N = 44

TABLE 3B. CURRENT PROGRAM ENROLLMENT – FIRST YEAR

Enrollment	Operational %
None/no information available	25.0
1 – 24	25.0
25 – 74	22.7
75 – 149	18.2
150 – 299	2.3
Over 300	6.8
	100.0
	N = 44

TABLE 3C. CURRENT ENROLLMENT – SECOND YEAR

Enrollment	Operational %
None/no information available	38.6
1 – 24	16.0
25 – 74	18.2
75 – 149	20.5
150 – 299	4.5
Over 300	2.3
	100.1*
	N = 44

TABLE 3D. CURRENT ENROLLMENT – THIRD YEAR

Enrollment	Operational %
None/no information available	50.0
1 – 24	15.9
25 – 74	20.5
75 – 149	9.1
150 – 299	4.5
	100.0
	N = 44

TABLE 3E. TOTAL PROGRAM ENROLLMENT

Enrollment	Operational %
1 – 24	11.4
25 – 74	19.1
75 – 149	9.1
150 – 299	38.6
Over 300	9.1
No information available	22.7
	100.0
	N = 44

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 3F. PROGRAM GRADUATES

Graduates	Operational %
None/no information available	56.8
1 – 24	20.5
25 – 74	11.4
75 – 149	2.3
150 – 299	4.5
Over 300	4.5
	100.0
	N = 44

TABLE 3G. STUDENT ACADEMIC PERFORMANCE

Academic Performance	Operational %
Better than those in regular program	54.5
Comparable to those in regular program	25.0
Not as high as those in regular program	2.3
No information available	18.2
	100.0
	N = 44

TABLE 3H. STUDENT REASONS FOR CHOOSING THREE-YEAR PROGRAM

Reasons	Operational %
Less cost	70.5
Early entry into job market/graduate study	50.0
Appeal of innovative curriculum	40.9
Promise of close faculty/student mentor relationships	36.4
	N = 44

TABLE 31. COST PER STUDENT

Cost Per Student	Operational %
About the same as in regular program	50.0
Less than in regular program	38.6
More than in regular program	4.5
No information available	6.8
	99.9*
	N = 44

4. Time-Shortened Degree Program Operation

A primary reason for time-shortened degree program success is attributed by 65.9% of the respondents to be its appeal to students who ordinarily would not enroll at each institution. It is often noted that three-year programs seem to attract a "special breed of student" who want to "see themselves as central in an education which allows them to work in ways which best fit their learning styles." Nearly 64% of the program directors feel that another reason for continued success is the three-year baccalaureate curriculum's enhancement of the institution's public character. Positive influences on institutional change/development are listed as causing (1) the faculty to become more aware of non-traditional types of programs; (2) revision of the general education sequence and several departmental programs; (3) development of innovative courses/curricula; (4) attraction of outstanding, more mature students; (5) modification of college/university operational criteria. Grant/campus funds encumbered for project development and maintenance over a specified period of time also insure a certain degree of success.

Of the 44 institutions reporting TSD programs, 95.5% indicate that time-shortening is still a goal. Several campuses cautioned, however, that time-shortening is not the only program objective, but that "individualization of the process" is the basic intent. Forty percent of the curricula have been modified in some way to serve better the needs of the students. Program revisions include lowered admission requirements for Early Entrants; design of new qualifying examinations for the degree; reduction of number of credits allowed in the program as part of a larger curriculum; development of new interdisciplinary majors and cross-disciplinary general education courses; additional faculty staffing; detail of student performance evaluations.

The TSD programs represented seem to have received relatively high administrative and student acceptance within the parent institution; faculty acceptance has been average. Private foundation grants provided the highest percentage of original funding for program planning and implementation. Most current financial support comes from the general institutional budget. Some respondents indicate that their programs have reached a level of self-support. Eighty-two percent of the reporting colleges/universities have planned and/or completed a summative project evaluation. Seventy-nine percent of the campus directors are able to cite noteworthy program components, including trial summer session enrollment, individualized internship programs, contract agreements, and most often, the flexibility of self-pacing. Anticipated program futures vary from a permanent place in the institutional curriculum (77.3%) to ultimate phasing out (6.8%) because of additional expense and lack of student enrollment. Several institutions were unable to predict program future.

Table 4A-4I present data pertaining to respondents' TSD program operation.

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 4A. REASONS FOR CONTINUED SUCCESS OF PROGRAM

Reason	Operational %
Attracts students	65.9
Enhances institution's reputation	63.6
Provides opportunity for faculty innovation	31.8
Provides positive impact on institutional development	31.8
	N = 44

TABLE 4B. IS TIME-SHORTENING STILL A PROGRAM GOAL?

Time-shortening Still a Goal?	Operational %
Yes	95.5
No	4.5
	100.0
	N = 44

TABLE 4C. HAS PROGRAM BEEN MODIFIED SINCE IMPLEMENTATION?

Program Modification?	Operational %
Yes	43.2
No	50.0
No information available	6.8
	100.0
	N = 44

TABLE 4D. PROGRAM ACCEPTANCE WITHIN PARENT INSTITUTION

Program Acceptance	Operational %
Administration	
High	75.0
Average	13.6
Low	4.5
No Information Available	6.8
	99.9*
Faculty	
High	36.4
Average	36.4
Low	20.4
No Information Available	6.8
	100.0
Students	
High	68.1
Average	15.9
Low	9.1
No Information Available	6.8
	99.9*
	N = 44

TABLE 4E. CURRENT FINANCIAL SUPPORT

Current Financial Support	Operational %
General Institutional Budget	59.1
State	27.3
Private Foundation Grants	27.3
Federal Agency Grants	6.8
Special Fee	6.8
Other	13.6
	N = 44

*Percentages have not been adjusted to round figures and therefore column totals will not equal 100% in all cases.

TABLE 4F. SOURCE OF ORIGINAL FUNDING

Original Funding	Operational %
Private Foundation Grant	40.9
General Institutional Budget	34.1
State	20.5
Special Fee	4.5
Federal Agency Grant	--
Other	4.5
	N = 44

TABLE 4G. EVALUATION PLAN

Evaluation Plans	Operational %
Summative Evaluation Planned or completed	81.8
Evaluation Plan not Included in Time-Shortening Component	18.2
	100.0
	N = 44

TABLE 4H. OUTSTANDING COMPONENTS

Outstanding Components	Operational %
Self-Pacing/Individualized Degree	17.1
Community/Governmental/Professional Internships	11.4
Coordination of High School/College Gen. Educ. Curriculum	2.9
Cost Reduction	2.9
Job/Home Flexibility	2.9
High Percentage of Three-Year Graduates	2.9
No Grades, No Credit Hours	2.9
Mentor/Preceptor Relationships	2.9
	N = 35

TABLE 41. TSD PROGRAM FUTURE

Program Future	Operational %
A permanent place in campus curriculum	77.3
Ultimate phasing out	6.8
Other (unknown)	9.1
No response	6.8
	100.0
	N = 44

5. Problem Areas Encountered in Operation of Time-Shortened Degree Program

Problems cited most frequently by respondents relate to lack of faculty interest and support within the parent institution; student recruitment and early orientation; and general financing in times of budgetary cutback. Other problem areas encountered are listed in Table 5 below.

TABLE 5. PROBLEMS ENCOUNTERED

Problem Area	Operational %
Student recruitment, orientation and adjustment	30.3
Lack of faculty interest/support	27.3
Funding	18.2
Design of curriculum, tests, screening methods, evaluation and faculty workload measures	15.2
Lack of communication within the college community	12.1
Lack of student interest	12.1
Resistance to change/innovation	9.1
Retention	9.1
Program quality control	9.1
Acceptance by and coordination with other levels (high schools and/or junior colleges)	6.1
Administrative red tape	6.1
Faculty development/training	6.1
	N = 33

Other noteworthy areas of concern relate to function/structure relationships between three-year programs and their respective parent institutions. Lack of intra-campus communication is evident in several instances involving projects operational in 1973 whose directors are currently unavailable for response; campus persons queried for information indicated no knowledge of such programs sponsored by their institutions and were unable to refer inquiries to the appropriate academic division. In some cases method and type of faculty appointments are in dispute. On one campus the shared-faculty concept works well with departments whose enrollments are shrinking but poorly with

those that can't secure additional lines to support rapid growth. There is some disagreement among academic administrators as to how faculty involved with the time-shortened programs should be compensated. Lack of adequate finances and time to train TSD faculty and staff are ever-present problems.

Program operation involves the working out of such detail as logging faculty workload for mentoring and advisement, as well as determining appropriate methods of compensation for such responsibilities. There is also concern over the academic validity of some of even the more traditional methods of time-shortening such as faculty designed area exams, standardized tests, etc.

Many directors report that students are highly interested in the academic quality of the programs; standard grades and "acceptability" are more important to the "present crop of students" on one campus than an innovative program. Other students, particularly early college entrants, are reluctant to accept the "protection" of college for shorter than the traditional time span. This relatively early exposure to "real life" which the students experience in three-year programs can be offset if the programs entail special advantages in terms of post college opportunities. In cases where students develop their own curricula some respondents report difficulty in controlling academic program quality.

6. Interesting Findings

- 82% of the reporting institutions (N=54) indicate fully operational programs.
- 11.5% of the programs originally planned were never implemented.
- Lack of program success is generally attributed to:
  a. Negligible positive impact on institutional development;
  b. Overall faculty opposition to the TSD concept;
  c. Little student, faculty, administrative interest in time-shortening.
- Nearly half of the institutions reporting operational TSD programs were founded before 1875.
- 40% of the three-year programs no longer operational were housed in colleges/universities founded 1950-1974.
- The majority of operational programs are found in institutions enrolling 5000-9999 students.
- 70% of the colleges/universities reporting unsuccessful programs enroll under 2500 students.
- Most TSD programs are reported in institutions of 250-499 faculty.
- Programs that failed were staffed generally by a college-wide faculty of under 100.
- The majority of campuses offering TSD programs grant degrees through the Doctoral level.
- 50% of the institutions reporting non-operational programs grant the Bachelor's Degree and below.
- The majority of operational programs currently enroll 150-300 students.
- Most programs report under 25 graduates.

- Most successful programs were implemented with 25-75 students.
- TSD student academic performance is generally reported as better than that of students enrolled in the general institutional curriculum.
- Less cost is a major appeal of 70% of the reporting TSD programs, as well as early entry into the job market and graduate school.
- Program success is attributed by 65.9% of the respondents to its general innovative appeal. 64% of the institutions report enhancement of their public character/reputation.
- Time-shortening is still a goal in 95.5% of the institutions reporting a three year degree program.
- 40% of TSD curricula have been modified since program implementation.
- Successful TSD programs are relatively well accepted by the administration and students.
- Faculty acceptance of operational TSD programs is reported as average.
- Private foundation grants provided the highest percentage of original TSD program funding.
- 59.1% of the programs on reporting campuses are currently funded by the general institutional budget.
- 77.3% of the successful programs expect to become permanently placed within the parent institution.
- 6.8% of the TSD programs currently operational expect ultimate phasing out due to high maintenance and development cost and lack of student enrollment.
- TSD problem areas are mainly reported as:
    a. Student recruitment, orientation and adjustment;
    b. Funding;
    c. Lack of faculty interest/support;
    d. Curriculum and test design, screening and evaluation methods, faculty workload measures.

INSTITUTIONS RESPONDING TO QUESTIONNAIRE IN 1975

Institution	TSD Program Status	
	Operational	Non-Operational
Alfred University, New York State College of Ceramics		x
Appalachian State University	x	
Bellarmine College	x	
Bowling Green State University	x	
California State College, Bakersfield	x	
California State College, Dominguez Hills	x	
Catholic University of America, College of Arts and Sciences	x	
City University of New York, Herbert H. Lehman College	x	
City University of New York, John Jay College of Criminal Justice	x	
Colgate University	x	
College of New Rochelle	x	
Concordia Senior College		x
Florida Atlantic University	x	
Florida Technological University	x	
Francis Marion College		x
George Washington University, Columbian College of Arts and Sciences	x	x
Hampshire College	x	
Huntingdon College	x	
Newark State College	x	
Northeastern Illinois State University	x	
Northwestern University	x	
Ohio University	x	
Pace University		x
Regis College		x
Rosary College	x	
Saint Francis College		x
Saint John Fisher College	x	
Saint Louis University, College of Arts and Sciences	x	
San Francisco State University		x
Shimer College	x	
Simon's Rock College	x	
Southern Methodist University	x	
State University of New York at Albany	x	
State University of New York at Binghamton	xx	
State University of New York College at Buffalo	xx	
State University of New York College at Brockport	x	
State University of New York College at Fredonia	x	
State University of New York College at Geneseo	x	
State University of New York College at Plattsburgh	x	
Stephens College	x	
Syracuse University	x	
Trinity College	x	

INSTITUTIONS RESPONDING TO QUESTIONNAIRE IN 1975 (Continued)

Institution	TSD Program Status	
	Operational	Non-Operational
University of Florida	x	
University of Illinois at Urbana	x	
University of Maine		x
University of Minnesota, Twin Cities		x
Raymond College, University of the Pacific	x	
University of South Alabama	x	
University of South Florida	x	
University of Southern Mississippi	x	
University of Utah	x	
Utah State University	x	
Vanderbilt University	x	
Webster College	x	

A POINT OF VIEW

---Richard Meisler

I'm going to speak out of turn in a number of ways today so I want to say something nice before I say the negative things. The money that we received from the Carnegie Corporation has been very meaningful to me personally. It has enabled me to work towards realizing a dream after 15 years. It has been the most important struggle of my professional life, and I also believe it has helped a number of students. I am grateful for the opportunity that Carnegie has given me and others to develop an individualized degree program. This is my version of civilized remarks before I bite the hand that has fed us.

Less Time, More Options, if you haven't seen it recently, is not inscribed on granite slabs as some people seem to think. It's on shiny paper. I think as I read it that it's a very mixed bag. In some parts it is confusing, which is my polite way of saying that I think it is confused on some very important points. For example, it decries the credentialism in American society and proposes to reduce and simplify the degree structure; but it also proposes a system of awarding more certificates and diplomas. Another point, it wants students to have more chance to change direction, but it also proposes programs that would give them much less time to do it in. It proposes time-shortening without, in my judgment, ever making any conceptual connection between the substantive questions of education and the economic advantages of shorter degree programs.

Despite Alden Dunham's comments neither the report nor the design of most of our time-shortened degree programs address the substantive issue of quality. As a co-designer and director of one of these programs, Buffalo State's Early Admission Program, I make this statement without apology. I think we gave students a good opportunity and I think that students have benefited from it and are continuing to benefit from it. But it seems to me important to understand the limits of what we have been doing. We have been experimenting with time-shortening because it promises dollar savings and in most cases for very little other reason. I'm sure that Alden Dunham's analysis of the legislative and public stance towards higher education is correct. They don't like us much and they want to give us less of the time. However, I question the response of Alden and the Carnegie Corporation which has been to push one of the weakest portions of *Less Time More Options* – time-shortening – for the purpose of saving money.

Here are some of the facts that I can't ignore, when we consider the question of saving money in higher education. President Ford vetoed as inflationary an education budget of 7.9 billion dollars. The veto was happily overridden. The sum is about the same as this year's increment in the defense budget. That budget, as you know, comes to approximately 90 billion dollars. All kinds of important human needs in our society, including higher education, are in money trouble, precisely because of the country's enormous and destructive expenditure on arms.

The Carnegie Corporation represents in the public sphere one of the great concentrations of private wealth. Shouldn't they encourage the improvement of education, even if it is costly, while they address the basic issue of national priorities and expenditures?[1] I think so, and I would rather they did that than to use their money to buy from us programs that shorten the degree earning process and do very little else. One of the reasons I wish they had a different strategy is that if they did they wouldn't ignore some of the wonderful things in the report that we call *Less Time, More Options*. For me, certain passages of that report come alive with educational insight. The Carnegie Commission offers a short and beautiful description of the fact that higher education is needed by different people at different times in different settings for different reasons. When the report talks about more options, in response to this fact it foresees a more complex and interesting system of higher education that will be able to respond to a much wider range of students and their needs. The report is most interesting when it talks about options that would bring students off campus into other parts of the world, and when it talks about the advantages of having many different types of people in different age groups becoming part of the student body.

[1] Ed. note: The Carnegie Corporation has, in fact underwritten studies of the Brookings Institution directed to such issues.

I want to talk now about our individualized degree program we call the IDP, one of the Carnegie funded programs. It's time variable, not time-shortened. And it probably isn't cheap. But it is in response to some of the other challenges of *Less Time, More Options*. The idea behind the IDP is that the student constructs an education of his own based on his own interests and goals. He does not necessarily take regular courses, and best of all, he does not have a series of competencies prescribed by somebody else to achieve . Without grades and credits, an IDP student works on studies and projects that he originates. He finds a faculty member to sponsor and supervise and evaluate his project. The project is described in a formal written contract. The learning contract may last as long as a semester. It may last much longer. One contract may occupy a student for any given time, or he may be working on many contracts simultaneously. The student and professor jointly write a detailed description of the student's learning when the contract is evaluated at his completion. After a student has completed a number of learning contracts, a degree committee is formed. The committee consists of the student, the chairperson, or a designated representative from the student's major field, and a core faculty member of the IDP. The committee's task is to receive the written evaluations from a student's learning contract. The committee compares the student's accomplishments with the requirements of the conventional degree program. The degree committee has the authority to determine how much of the college's requirements have been fulfilled by a student. The student graduates when the degree committee says the requirements have been met. This may happen in more than four years, it may happen in four years or less.

The reality of the IDP is the individual student's confronting the task of creating his own education. The goal is to produce an independent learner: an autonomous person who can deal with his learning needs throughout his life. Students are not accustomed to this type of experience. We find that it is terribly difficult. Some students drop out, although they almost all say that they have learned a lot, and usually what they mean is that they have learned a lot about how to learn. IDP students make enormous progress in this task of learning how to be independent learners. The process is frustrating to them but decreasingly so. As they acquire the skills of an autonomous learner, they make more rapid academic progress and become happier. We are at a point in the third year of the program when we are seeing some students approach graduation very quickly, though they are a handful. We are also seeing many in a kind of accleration process in which they went very slowly at the beginning, and they are reaching their goals much more quickly now

Out of a faculty of 600 people, last year we had about 150 who were willing to work with our students, and by and large the feedback we get from them is very positive. So even though the requirements of the program for both students and faculty are quite different from conventional roles we are meeting success in recruiting them for participation.

MORE OPTIONS: LESS TIME?

--DeVere E. Pentony
Thomas M. Watts

The question of more educational options is a controversial one since much of the question focuses upon the certification of learning or the opportunity for learning through non-university or college experience and upon altering methods and styles of teaching. Inter-linked with this question is the no less controversial matter of time. And how typically American it is! Americans tend to be people in a hurry. Speed, rapid accomplishment, a millionaire before forty, rushes to judgment, impatience with, as well as near intolerance for, the contemplative all seem to be part of the American ethic. A hurried time dimension rushes through our national life. One sometimes gets the impression that we are jet-propelled without destination. Thus, when some of our finest academic minds focus upon the American academic experience, it is not surprising that questions of the amount of time spent on higher education surge to the forefront. Time is money. Time spent in college is expensive – expensive to the tax-paying society, expensive to students, and expensive to parents, many of whom still pay the bills. Although our affluent society condones daily waste in the sectors of our private enjoyments, our public morality tends to equate waste with sin, and to call for constant efforts to save. In this context, suggestions that an entire year can be saved from the baccalaureate experience become almost thrilling. To promise to reduce undergraduate degree time by one-fourth without a diminution in quality is to bring hope out of despair – hope that the cost spirals of higher education can be brought under control and hope that time will no longer be wasted. For budget-battered administrators and tax-shy politicians, " 'tis a prospect devoutly to be wished."

Yet procedural and value questions remain for those of us enmeshed in the problems of learning, teaching, and adding to the fund of knowledge about the universe and its inhabitants. To us, two simple questions spring immediately to mind: Will there be less time, and should there be less time, spent in the journey from college entry to college exit? Upon reflection, what insights do our Carnegie-induced experiments provide?

WILL There be Less Time?

In a certain sense, less time is clearly within our grasp. It is easy to understand that the traditional four years is merely an arbitrary designation of time to be spent to secure a B.A. degree. Probably a product of experience and not really a plan (although it might have originated with the four years that it takes the seventeen-year-old male child to reach his twenty-one-year-old majority), four years can hardly be defended as a rational determination of time required for an "education." Arbitrary, four years are; they can be arbitrarily reduced. The ways are obvious. Simple reduction by one-fourth of the units required to graduate, accompanied by creative ways to provide more integrative general education and major experience is one way. Other routes – not necessarily mutually exclusive – are dual matriculation (high-school and college), advanced placement, credit by examination, credit for experiential learning, and credit for military, Peace Corps and Vista service. There is also the possibility of eliminating required general education or at least significantly reducing it. Few of the students would probably mourn its demise. Finally, there might be some hope for time-saving in adopting new pedagogical techniques such as self-paced instruction, individualized learning systems, and computer-based instruction. Thus the answer must be that time-shortened degrees are not only with us in experimental form, but also it is conceivable that the movement could spread. But will it?

There are powerful forces that raise doubts about this prospect. Not the least is the faculty. Self-interest in continuing employment in days of steady state enrollments is bound to make faculty skeptical and resistant. Strongly held, rational conviction of the fundamental unsoundness of reducing the time in which students are exposed to higher educational efforts will also block most attempts which have time-shortening as a goal. An illustration from the faculty at San Francisco State University clearly supports both points. Listen to the words of the unanimously passed resolution of the department chairs in the School of

Behavioral and Social Sciences on the subject of Credit for Experiential Learning: "No credit will be given to any student by any Department in the School of Behavioral and Social Sciences merely for past work experience," and "Students enrolling at San Francisco State University may receive credit only if a *formal* learning experience was part of the total job," and "The amount of credit which any student may receive for this type of learning experience is limited to six (6) units." (1973) It seems obvious to us that most faculty are likely to react in this way to almost all major efforts to reduce the number of residence units required for a baccalaureate degree. While they may continue to be tolerant toward some of the experimental efforts represented here in this conference, it would be folly to expect anything less than vigorous opposition to widespread adoption of a time-shortened degree. Moreover, those who believe that the four-year tradition can be ended by administrative or legislative fiat may be in for a long struggle in the approaching climate of collective bargaining.

A picture of students rushing towards commencement is probably out of focus too. While the evidence is unclear concerning student proclivities toward speeding up their undergraduate careers, one must remain skeptical about the willingness and enthusiasm of most students to demand opportunities to acquire their B.A. degrees in shorter periods of time. To be sure, if the baccalaureate becomes a three-year degree, or if credit for knowledge and experience gained outside of college is easily granted, they are likely to accept it with equanimity. Although in the latter case we cannot be certain that they will hasten their graduation dates by major time increments (see below), we are quite certain from the experimental results on self-pacing at San Francisco State University that they will be unlikely to seize isolated opportunities to shorten their journey through college. Survey results concerning an "ideal" course at San Francisco State University reinforce the hunch that very small numbers of students will willingly participate in deviations from the traditional instructional modes and requirements, including foreshortening of time.

The power of tradition and other non-academic considerations to block change in the four-year effort should not be overlooked. Should the entire higher educational system in any locale, for example California or New York, be proposed for a change to a three-year degree, inertia alone (always connected to tradition) will make change difficult. Although the public mood about public higher education may still reflect the questioning and skepticism of the sixties, there is very little evidence to suggest that the public is clamoring for time-shortened degrees. No doubt, the attentive publics and legislators will continue to be in favor of tightening expenditure of public funds, but it remains to be seen whether massive legislative or public support can be gained for radical shortening of the college degree, particularly once some implications are spelled out.

Among those implications may be that foreshortening means adding significant numbers of young people to the employment market one-fourth sooner. Realization may creep in that students have a capacity to live perhaps even more cheaply than welfare recipients. Arguments are likely to be brought forward that they should not be hastened toward the half-open doors of the hiring halls. Furthermore, and strangely, one should not underestimate the possibility of pressures to maintain the four-year degree from the old school advocates of intercollegiate athletics and other collegiate traditions attached to time. Many of those occupying positions of legislative and administrative influence in the various states of the nation are the very same people who may be skeptical about shortening the experience in college if it means that, say, the football team will have lost its star quarterback one year sooner. Although people of that sort will apply their influence selectively to the big prestigious universities and the main state-supported schools in the smaller states, there is reason to believe that, if they succeed, the demonstration effect on the rest will be powerful indeed. If Berkeley has a four-year degree (along with its four-year quarterback), why not Stanislaus even though there may be no "star quarterback" at Stanislaus? Stanislaus will be pressured to maintain its prestige by emulating Berkeley in terms of the number of years spent as an undergraduate. Massive, radical change seems unlikely if the big prestigious universities do not initiate it. The desire for developing excellence will continue to be shaped by what the very best institutions are doing. And there will be important, non-academic forces blocking change.

Nor should the sheer inertia signalling acceptance of things, as they are, be discounted. As a national folk, we are accustomed to the traditional four years in college. Many of our constituents, our prospective

students, and parents expect a four-year experience and may not be easily moved away from that expectation. They may even regard short-timing as short-changing. Indeed, a change to three years may be unpopular or just too much trouble, particularly in the face of faculty opposition, student indifference, and possible alumni resistance. This is not to say that experiments here and there cannot be undertaken and maintained, but wholesale change is truly in doubt.

If the possibilities for the widespread adoption of the time-shortened degree appear dim, what about the chances for acceleration in various parts of the traditional curriculum on a piecemeal, individual-choice basis? At first glance, the picture seems brighter here. Credit by examination, credit for experiential learning or prior experience, self-paced, individualized instruction and advanced placement, all offer opportunities for the motivated, especially capable, goal-certain student. That a number of such students have shortened, and continue to shorten, the time spent garnering the baccalaureate degree is clear. Yet many institutions, including San Francisco State and Bakersfield, have not been particularly responsive to these students in the past. The Carnegie-supported projects at both institutions offered the first real opportunity for a systematic effort at exploring new possibilities. What have been the results?

The purpose of this portion of the discussion is to examine to what degree evidence developed by these two projects, one at California State College, Bakersfield, the other at San Francisco State University, supports the hypothesis that "increasing options to students, such as assessment of outside experience and challenge of course work, can lead to time-shortening without sacrificing educational quality." It is obvious that this statement has two parts. The first of these concerns the degree to which increasing options can, in fact, lead to time-shortening. The second part of the hypothesis concerns the quality of the education obtained by those students who do, in fact, manage to shorten the time spent in obtaining their baccalaureate degree.

Evidence from these two projects suggests that the answer to the time-shortening question is "not very much," while the answer to the protection of quality question is "probably."

In both projects, such options as credit by examination, individualized courses, and experiential learning have been provided to students in a wide range of possibilities and formats. In both of our projects we have concluded that these options are in many ways desirable. The options themselves are also likely to be valuable to a relatively small percentage of students in terms of substantial contribution toward less time in college. In fact, it seems to be the case that the numbers of students actually completing their work in "less time" are more than offset by those students who completed their work in the "same time" or at least, with respect to individualized courses, took "more time" to complete their work. Further, we have not found evidence that suggests that very many of the students who take advantage of one alternative option (such as a challenge examination) also take advantage of other options (such as the individualized or modular courses). In other words, except where students have earned very large blocks of credit (such as CLEP "instant sophomores" or in the case of a student qualifying for extraordinary amounts of credit for outside experience), students do not seem to be very inclined to accumulate options in such a way that anywhere near a half of a year's work might be involved. Indeed, we have found that many of the students who have earned CLEP credit, rather than rush through their baccalaureate program, tended to avail themselves of other course options in the curriculum in lieu of courses they would have had to take were it not for the CLEP credit earned.

An example of the kind of evidence we have appraised in coming to these conclusions may be found in a followup study done on students who, in 1971, earned substantial CLEP credit on the Bakersfield campus. In that year, both Bakersfield and San Francisco participated in an attempt to administer CLEP general education examinations to all incoming freshmen at no cost to the students. At Bakersfield, some 55 students (out of approximately 200) earned 30, 40, or 50 units. Three years later, by the spring quarter of 1974, only 27 of these were still around; half had either transferred or dropped out. Of these, 14 were eligible to graduate and of these 14, 8 graduated one full year early. This is approximately 14 percent of the original 55 (and about 4 percent of those who sat for the exams). That may, in fact, seem like a rather healthy relative percentage, but of the 27 still around that spring, only 7 took advantage of opportunities to complete modularized courses, and only one received additional credit by challenging a course through examination.

While our experience with modularization and self-pacing suggests that it is a valuable option for a number of students in both shortening their degree time and in increasing their learning options, we have also learned that self-pacing for many students can provide an opportunity, when permitted by the course format, for students to procrastinate in accomplishing course objectives and, by taking incompletes, delay their degree objectives as well. At San Francisco State University, incompletes ranged from over 75 percent to slightly lower than forty percent in several of our experiments in self-pacing. In one experiment we are still getting requests over three years later to complete the courses.

The experience we have had with diagnostic testing and challenge of courses by examination, as well as credit earned for experiences outside of the classroom, suggests that these particular modes are more likely to serve students' interests in reducing the time and removing the obstacles to short-term goals such as getting by the California American Institutions requirement, prerequisites for desired courses, general education requirements of the college, and the like. A by-product, of course, is in the reduction of the amount of time necessary to complete all of the requirements for a degree. This seems to be the sole objective, based upon the limited evidence we now have, of students' exercising the option available on both campuses to earn credit for outside experience. On the Bakersfield campus, credit may be earned at either the lower division or the upper division level. The San Francisco program is designed exclusively as an alternative to some of the general education requirements. On both campuses, the experience to date suggests that there will be relatively small numbers of students who can appropriately qualify for such credit and therefore, while significant to the particular students involved, the overall impact upon the university in terms of cost savings is not likely to be very great.

If our experience is as widely shared as we suspect, it may be appropriate here to suggest that some of the goals outlined by the Carnegie Commission in 1971 (see page 31, *Less Time: More Options*) may be overly optimistic. Two that we have particularly in mind are: "(1) The average length of time to a B.A. degree [should be] shortened initially to three and a half years, and then to three years, by 1980 resulting in: (2) a reduction or savings in operating expense to universities of ten to fifteen percent."

We suggest that through increasing options alone, it is not likely that we will approach the "three year degree" in anything like another five years. It is probably more realistic to look for about ten percent of the students in any institution seriously attempting to utilize multiple options with the purpose of significantly reducing their time spent in college. This is not to say, of course, that such a possibility does not exist in a totally restructured baccalaureate program.

Cost savings are even more problematic we have found. Self-paced courses turn out, on both campuses, to be generally less efficient than traditional formats. While an objective was to free faculty time for more productive pursuits, it turns out that these "pursuits" are more individual time with the students. Admittedly, few of the projects made much use of student proctors, but we suspect that their use would not greatly alter the situation since their effectiveness is likely a function of class size.

We see no way that experiential learning can greatly reduce costs either, since a considerable investment in faculty assessment time turns out to be involved. And, unless standardized test banks are developed, considerable faculty time is also involved in reading and grading exams where examinations are an option. Indeed, test banks have been developed for some courses on our campuses but again, we expect that their use is appropriate for limited numbers of courses and thus limited numbers of students. In short, we expect savings to occur but they will probably be more modest than those projected by the Commission.

The second part of the hypothesis concerns the degree to which less time leads to a sacrifice of quality. Having stated our reservation concerning time (and cost) savings, what effect has time-shortening had on quality? Here the answer depends on which options we are talking about.

Depending upon the standards applied, pre-college testing seems to discriminate among students on the basis of the ability to perform in the classroom. The greatest amounts of credit are obtained by those who do best in classes. Therefore, it appears that in those cases where students have progressed more rapidly, the

quality argument must rest upon whether more time equates with more quality. Since it is not the "average" student who progresses more rapidly in this regard and since "the best and the brightest" are exempted from courses where they already have the content, quality is probably not diminished although an opportunity to take them to enhanced excellence is likely to be lost. Since the average student has little opportunity to progress more rapidly, goals for a reduced time baccalaureate cannot be met and the quality question remains peripheral.

Our experience with individualized courses suggests quite clearly that quality has not been sacrificed if we can believe the comparative assessments by both students and faculty. Those students who successfully complete these courses are high on time, as are the instructors who have developed them. Since they are perceived as more demanding than traditionally organized courses, this is not surprising. But, as we have already noted, self-paced modes have made the least significant contribution to "less time."

Assessment of outside experience has been shown to be most likely to lead to a time-shortened degree for those students who qualify. The question of possible sacrifice of quality turns partly on whether it is likely that the experience was more "enriching" than a comparable amount of time (and units) in formal classes. This, in turn, depends both on the quality of the assessment of what was learned from the outside experience compared with the quality of the regular instructional program. It also concerns the question of whether the student might be better off with both the experience and the formal courses. The key to quality assessment lies in whether the student has systematically reflected upon what he has learned, and it is of course possible that a student may not reflect upon what he has learned from a course.

Our conclusion is that educational quality is not particularly enhanced by this alternative mode, but it is not likely to be sacrificed unless the experience, rather than learning from experience, is credited. This conclusion of little damage to quality rests on the assumption that some sort of limit is to be placed on the amount of credit that can be awarded in this mode. Indeed, the question of limits calls into question the premises upon which experiential credit should be granted and the appropriateness of the university as merely a certifying agency along with its educational functions. We are aware, for example, that other societal institutions have been informally "granting credit" for things learned by experience for a very long time. Thus individual resumes get favorably reviewed by the boss, and people get promoted within occupations. It may well be that this is a more accurate indicator of successful learning of this sort than an ex-post-facto assessment designed to equate experiential learning with that which the university does uniquely.

The context of the projects described has been that of the four-year college or university, what we have conventionally referred to as "institutions of higher learning." We suggest that not everything taking place in postsecondary education is appropriate in "higher education." We suspect that some of the options now present in postsecondary education are more horizontal additions than vertical ones. That is to say, we may be adding dimensions that do nothing to advance the quality of education and the depth of learning by the student beyond secondary levels by simply adding other kinds of educational experiences and credits, if you will, at approximately the same level. For example, police academy courses are more appropriately conceived as a postsecondary dimension which have no place in higher education, and it is perilous and inappropriate to want college credit for the experience.

When we began these projects, one objective was to garner some evidence which might help to lead to a respecification of the meaning of the baccalaureate degree. We should now be ready to take up this task. In doing so, it will be well to keep in mind the conclusion of these evaluations: Those options which enrich the quality of higher education are not likely to be time-shortening, and those options that are time-shortening are not likely to be enriching.

SHOULD There Be Less Time?

A disinterested examination of the undergraduate curriculum at many institutions, such as San Francisco State and Bakersfield, would probably result in a recommendation that a three-year degree be established immediately. Current combinations of majors, minors, electives, and general education are far too

frequently uninspiring in the eyes of faculty and students alike. Little effort has been made to make goals and objectives of higher education clear to faculty, students, and the patron public. Distressingly content with curriculum building by course-title, we have neglected asking critical questions about desired learning outcomes. Thus, all too frequently we have dodged a searching inquiry into the meaning of our majors and have all but abandoned our concern for general education, which used to signal our best judgment of what a liberally educated person is. For example, a recent survey of the faculty of the School of Behavioral and Social Sciences on the question of General Education at San Francisco State University revealed the startling statistic that 83 percent of the faculty were either negative, neutral, or not familiar with the program at all. (Forty-two percent were negative; twenty-five percent were unfamiliar, and thirteen percent were neutral.) While it is true that San Francisco State's general studies program, exciting in its conception, is a product of the middle and the late sixties, when student demands for relevance resulted in implementation actions that nearly equated Zen Basketball with principles of economics, one suspects that faculty attitudes in other places are much the same.

A similar lack of enthusiasm can be discerned among many college students. The prevailing student view may be that college has become a bothersome series of obstacles – too often not meaningful – on their way to graduation. Major requirements, electives, and general education may be more like a melange of relatively unconnected, unexplained, and poorly articulated exercises having about as much to do with the development of a finely-honed and skill-developed intellect as a series of TV escape dramas. While we may never have had a clear knowledge of what a "Harvard man" or a "Yale man" was, who among us is bold enough to speak even in that idiom about our own graduates? Looking at us as an institution, students rarely know what we stand for. They do not even know in any precise way what learnings and skill development they were supposed to garner in their undergraduate years. Would they swear to an auditor or similar snoop that they now can write a decent sentence, identify a logical fallacy, and hold forth on a topic in their major for more than ten minutes? Though inertia and apathy may prevent them from doing anything about it, the students are unlikely to protest mightily if we hand them a degree in three years rather than four. Demanding students in the sixties cried for relevance, but floundered when identifying what that was. Many students in the seventies have fallen into a "career" malaise where the liberal arts tradition is endangered by their rush to job-specific majors in a privatistic hope for a better personal world. Thus, as far as student attitudes shape our programs, non-career majors and non-career aspects of the curriculum outside the major may decline. And if we do no better than now in explicating the breadth and liberal arts aspects of our curriculum, they probably should be diminished.

Yet, as important as faculty and student attitudes and opinions such as these are, they do not speak in any searching way to the questions of the relevance, appropriateness, and strength of our currently prevailing four-year programs. Because we have deep doubts, many of us would agree that if we don't do something we might as well have three-year degrees. But before turning to such an action, several steps would seem to be necessary. At our institutions, we need to fashion better diagnostic instruments to determine where our individual students really are in terms of previous knowledge and skills. Do they need what we require of them, or do they already have it? We need to identify desired student competencies in the major and general studies and develop instruments to determine to what degree students have these competencies as they enter college. Once in the college, these instruments can also be used to certify the attainment of agreed-upon baseline competencies, thereby allowing students to move at differential speed through the curriculum. Perhaps only in these ways should we creatively support the diminution of time spent in the undergraduate arena.

Avoidance of academic redundancy is a worthy goal, but we cannot be content with patch-work efforts or "new" constructions that purport to provide a significant educational experience at least equal to, or surpassing, current approaches when we do not know what these really are. Declining SAT scores would suggest that we may not be as redundant as some think. Students may be simply more widely informed without being "further advanced" as they enter college. Conjuring up grand designs and clever course and program titles, (no matter how possibly promising) and giving in to career-first advocates cannot be permitted to substitute for tough-minded inquiry into hoped-for learning outcomes. The identification of skills, knowledge, and attitudes, combined with the determination of effective learning experiences and vehicles for evaluation, remains to be done in places like San Francisco State University and Bakersfield and

many other institutions across the country if we are to have any real rationale for decreasing or increasing time spent in the BA programs.

Although we have argued here that steps of this sort are desirable, we could be pursuaded that no great harm would probably come from eliminating one year of undergraduate experience entirely. Many of our present efforts, particularly in the Social Sciences and Humanities, suffer from failure to determine our purposes. Our attempt to defend what we do now (including our hallowed time dimensions) are consequently weak and unconvincing. In that context three years may be as good as four.

But this is a counsel of despair and it must be seen against the awesome dilemmas of our time. It is now trite to mention that the knowledge explosion rivals the population explosion in many areas of inquiry and that the societal problems facing humankind have become more challenging in their complexity and more desperate in their prospects for the future of the race. We know more, but we don't know enough. The triteness of the observation should not prevent us from focusing our attention on the question of what this means for higher education.

We submit that it means that our citizenry must become better trained, better informed, better motivated and better equipped, both intellectually and attitudinally, to deal with the problems of human survival. Studies such as the Club of Rome's *Limits to Growth* and Robert Heilbroner's recent *Inquiry Into the Prospects for Mankind,* point out the terrible shortness of time between now and irreversible disaster. Although we cannot be sure, there is a certain face validity to the belief that we cannot hope to meet the demands put forward by a possible dim future in less instructional time. Many institutions, private and public, and many people, old and young, must be enlisted in the struggle. Surely higher education with its potential for developing skills, shaping attitudes, and bringing the awful truth to large numbers of our best and brightest, must take on a major share of the responsibility for helping our citizenry to measure up to the challenge of the immediate and not too distant tomorrow. Given the complexity and enormity of the task, it seems doubtful that we can accomplish these social purposes of instructing the young, retreading the middle-aged, and enlisting the oft-forgotten old in less time than we now take. Acceptance of the concept of the life-long learning society is long over-due, but the university must take as its special responsibility the task of developing and sharpening the skills, perspectives, understandings, and appreciations which will encourage and facilitate such a goal.

Less Time: More Options eloquently reminds us that learning goes on outside our harassed halls as many other institutions take on the burdens of educating and training the populace. But we submit that our relatively short time with a segment of that populace is the only time when a unified, extended, and systematic effort is attempted. The university in four short years takes on the plaguing task to provide understandings in depth and breadth, sharpen critical thinking, develop problem-solving skills and otherwise offer tools for making some sense out of the confusions of life. Our suspicions that we fall short of our goals should not discourage, but instead invite, us to examine what we have been doing and how we have been doing it more closely. Given the perplexities facing us, one doubts that such an examination would result in time-shortening for students. Rather, it should further highlight the difficulty of accomplishing our purposes in the traditional four years.

Still, the traditional four must be revolutionized. Arguments in this context – arguments about three versus four years – seem irrelevant. Again, the only way we can rationally proceed to begin such an activity is to begin searching inquiry into the meaning of our educational efforts. What are we trying to do? What are desired learning outcomes? What should our graduates be able to do? What kinds of comprehensive evaluative instruments do we need to design in order to determine more about the results of our efforts?

For a moment, let us look at one kind of inquiry that needs to be undertaken if we are to establish competency standards, develop comprehensive measures for determining competence, and thus fashion some ways to answer the question of how long a time it may take for a student to accomplish appropriate competency goals. At San Francisco State, under the able leadership of Dr. Ralph Goldman, a political scientist, and with the active participation of one of the authors of this report, we have been conducting an

inquiry into the meaning of the Political Science major. Professionals in the field of political science have not, up to now, addressed the question of what skills, knowledge, understandings, and perspectives a degree in political science stands for. We are arguing that this is precisely what needs to be done and have labelled our task as the development of a Major Assessment Profile. In a narrow sense, the MAP Project investigators are primarily involved in producing a comprehensive set of diagnostic examinations or profile instruments with which to measure how far along an undergraduate major in political science is in his or her advance toward the learning outcomes for that major. But, of course, political scientists almost never specify the learning outcomes they desire for their majors! As in so many disciplines, political scientists rarely if ever get together in their academic departments to design a thoroughly integrated, overall curriculum with which to guide their students toward specific learning outcomes. Further, their competency examinations are, by and large, homemade, as variable in quality and validity as the restaurant version of the "homemade" apple pie.

Given this highly unstructured curriculum setting, the MAP Project goal of producing a Political Science MAP Profile to diagnose the competencies of their undergraduate majors is very difficult, if not impossible. Yet, the MAP investigators believe there is great worth in pursuing the goal since the process can be an excellent device for meaningful curriculum review. The assumption is that the open and collective process of curriculum review is bound to compel political science faculty to (a) discuss their instructional objectives unambiguously and (b) devise means for observing and measuring (probably in relatively precise units) the learning outcomes experienced by the students. Not possible? Not measurable? An invasion of academic freedom? A drive for instructional conformity? These questions suggest how quickly a curriculum review process may become controversial.

The MAP investigators take the position that development of a diagnostic competency profile for the undergraduate major can provide a feasible and desirable focus for a discipline-wide curriculum review process. The MAP Project also assumes that learned behaviors are observable and measurable. The Project believes that a systematic and responsible process of professional discussion and review would possibly put limits on instructional license and chaos but would hardly disturb academic freedom. A curriculum review process may, in fact, enhance instructional innovation rather than compel conformity, simply by creating a discipline-wide process into which innovative proposals could regularly flow and through which professional teaching accountability may be accomplished.

What should be the substance of such a curriculum review process? Thus far, the MAP investigators have identified four topics for continuing inventory and review by the agency carrying on the process. The first is an inventory of special idiom of the discipline. To this end, the Project has compiled a raw list of about 53,000 terms (person names, place names, organization names, analytical concepts, etc.) appearing in 46 political science dictionaries, encyclopedias, specialized indexes, and the like. Elimination of repetitions, irrelevancies, and similar items reduced the list to 21,000. The terms on the latter list are currently being rated by a panel of ten political scientists to determine which terms political science undergraduates should know well, simply the aware of, or need not know. The panel, drawn entirely from The California State University and Colleges system, may approach being a fair representation of the membership of the entire discipline of political science. The resulting Political Science Concept Inventory for undergraduates will be something analogous to Basic English for non-English-speaking people, that is, the verbal foundation for acquiring a specialized language and conceptual perspective on reality.

A second substantive topic for the curriculum review process is the diagnostic or assessment profile. This will consist of a comprehensive set of test instruments for periodic measurement of the cognitive, affective, and applicative (applied, practical skill) types of behavior modification experienced by students at various stages of their study of political science. Obviously, there can never be a "final" version of the MAP Profile in Political Science, or for that matter, in any other discipline. The Profile's test instruments will necessarily be continually in process of construction and reconstruction for all the reasons set forth in the MAP GUIDELINES. As important as the Profile will be in measuring and diagnosing student learning outcomes, the need to produce and update profile instruments will provide a vital stimulus to the profession's continuing evaluation of its teaching objectives and curriculum designs.

A third topic, essential for preparation of the MAP Profile, will be the specification of the instructional objectives of undergraduate political education and the manifestations of these objectives in observable student learning outcomes or behavior modifications. The MAP GUIDELINES, in a proposed "Learning Outcomes Matrix," suggests five types of instructional objectives: intellectual (mainly the conceptual and propositional content of the discipline); communal (relating to the affiliative consequences of instruction); vocational (the career possibilities of study in political science); egocentric (the personality and ego-building aspects of achievement in the major); and the guardian (in which the student relates self to the instructional setting of his or her study). The matrix is completed by three types of learning outcomes: cognitive (informational and factual content); affective (positive or negative for different parts of the discipline's content); and applicative (how the student meshes informative and attitude in order to solve hypothetical problems). The MAP Profile would presumably consist of test items that validly measure the learning outcomes described in each of the fifteen cells of the matrix. MAP investigators consider the Delphi Technique of expert consultation as admirably suited for the discipline-wide specification of instructional objectives and learning outcomes.

The complexities of this enterprise are obvious, yet they cannot deter us from the effort. Even more difficult is the prospect of directing similar systematic attention to the general education aspect of undergraduate education. It is our understanding that commendable starts on this have been undertaken around the country. Many more institutions will need to get into the act soon. In the past, all too frequently, the approach to determining the nature of the general education program has been a mere general categorizing of the fields of knowledge coupled with a general statement of desired goals, a political division of them into the teaching areas of the college, and an application of grand labels to prospective courses. Out of this was supposed to come educational experiences which were exciting and worthwhile. That occasionally something exciting and worthwhile has resulted seems somewhat beside the point, since more often the general education program became a step-child of the major-oriented university, ignored, subordinated, and almost forgotten, and in either case, the opportunity for replication, inter-university transfer of learning and experience, and a systematic evaluation of the effectiveness of the efforts are lost.

Against darkening shadows on the near horizon, statements of desired competencies of a "generally educated person" simply must be attempted. They must be stated in behavioral terms, and they must be followed by a division of the general statements into more specific identification of competencies in the skill, cognitive, and affective areas. Then, a careful design of learning experiences and assessment strategies can be undertaken. Perhaps an example from an on-going, though still incomplete, effort being conducted by one of the authors in the School of Behavioral and Social Sciences will demonstrate the application of a potentially useful model.

This is a draft of a working paper for an ad hoc GE Committee on what should be involved in the Social Science General Education program. After deliberations over a number of weeks, the committee arrived at thematic topics and a title for the effort. The title is the rather pedestrian, "The Development of the Individual in Society." On the following pages is one person's effort to begin to identify what would be expected of those who would finally design the educational experience.

THE DEVELOPMENT OF THE INDIVIDUAL IN SOCIETY: THE APPLICATION OF A MODEL

A. Student Competencies

1. Statement: Students successfully completing this experience shall be able to comprehend in historical perspective the development of individuals in society by developing an ability to identify, analyze, and synthesize social, psychological, and environmental variables as they interact to shape personality and society. More specifically, students shall demonstrate an ability to describe growth and development of human personality; the growth and development of institutionalized systems of action (political, economic, social, etc.); and the growth and development of value systems (standards of proper conduct). Students shall develop an ability to relate the above learning to their personal growth and development and to empathize with at least one societal system in addition to their own.

2. Components of Competency:

   a. Knowledge

      1. Students shall demonstrate knowledge (understanding) of the facts/events in the rise of a western and a non-western society.

      2. Students shall be able to identify major values in their respective societal contexts and to compare and contrast them (for example: ways of mankind).

      3. Students shall be able to describe and analyze the relationship and interaction between culture and personality.

      4. Students shall be able to identify the personality-shaping variables in the societies studied.

      5. Students shall be able to describe the major individual and societal problems in the societies studied and the efforts to resolve them over time.

      6. Students shall be able to identify the types, principles of operation, and problems of institutionalized systems of action (political, economic, social, environmental, etc.) in the societies studied.

   b. Skills

      1. Demonstrate basic competency in identifying and explaining various approaches to understanding human behavior (theories, concepts, conceptual frameworks).

      2. Demonstrate understanding of the distinction between various types of scientific knowledge: descriptive, correlational, and explanatory.

      3. Demonstrate problem-solving skills, i.e., the identification of the problem, selection of desired outcomes, hypothesis of the cause of the problem, a research design, proposed solution, cost-benefit analysis, etc.

      4. Demonstrate ability to manipulate data statistically and electronically.

5. Demonstrate research skill.

6. Demonstrate communications skills – oral and written.

7. Demonstrate personal development skills (i.e., relating perspective gained in studying and development of the two societies to his/her own personal growth and development).

c. Attitudes (Affective Behavior)

1. Demonstrate ability to empathize with societies studied.

2. Develop appreciation for the complexity and interrelated character of human life.

3. Develop a respect for ways of behaving different from one's own.

4. Develop skills in analyzing the ethical aspects of behavior and critically evaluating them in terms of personal growth and development.

B. Learning Experiences (Curricular Tasks) for Facilitating Competencies

1. Traditional classroom lectures and discussion, approximately one-third of the time. Topics to be selected.

2. Small group project reviews with selected goal-directed paths, approximately one-sixth of the course.

3. Exercises (essays, replication of previous research, data manipulation, individualized learning modules, computer-assisted instruction).

Accompanying this kind of statement and necessary to its implementation must be a willingness to explore changing faculty and student roles, especially if the competency movement becomes university-wide, i.e., majors, minors, electives, and general education.

On the faculty side, the result of precise determination of learning outcomes and design of instructional strategies may well alter the traditional teaching activities. The probable lessening of the lecture as the primary instructional vehicle and the need and possibility for more effective individual counseling, as we are called upon to meet the diagnosed difficulties of our students, demand some role change for faculty. The requirements to develop more effective assessment devices may similarly call for a greater differentiation of faculty roles and activities. At the very least, greater attention will need to be paid to the assessment, diagnosing, and counseling roles to be performed by each individual faculty member. At the most, we need to be prepared for partial separation of those roles in such a way that an individual faculty member during any given semester may find his or her primary responsibilities in only one of four types of roles. While our intuitive sense is that combining of these roles in one person is probably better educationally, experiments need to be conducted to discover whether this is indeed true.

On the student side, there must be similar willingness to adjust to learning strategies different from their past experiences. Our San Francisco State University Ideal Course Survey tended to demonstrate that most students were rather passively content with the vague, rather undemanding, and moderately systematic educational experiences they are receiving. Listening to lectures, note-taking, worrying through relatively small numbers of exams, and writing an occasional term paper probably constitute most students' perception of what does and should go on at the university. Yet a focus on learning outcomes, with a consequent more specific identification of particular learning, may face the student, as well, with the

necessity for change. The need to take more responsibility for his or her own learning, the necessity to emerge from a faceless, almost nameless, lectured audience, and the requirement to demonstrate more continually the possession of certain skills and understandings may change academic life enormously for the student. She or he may find it no longer possible to satisfy the university requirement for development of communication skills by passing a course in English and Speech when she or he finds, for example, that effective communication is part of competency expected in General Education and in the major as well. Though the demands on the student in the various divisions of the curriculum may seem unending, they can also be reinforcing. The student might even begin to grasp the connection between the subject matter separations of the university and to learn what it means to be an educated person.

General Conclusions

Perhaps the most outstanding result of our experimenting with *Less Time: More Options* is the stimulation it has provided to question what we have been doing. In one way or another nearly all of the sacred bulls in our academic ring have been challenged. Not only time as an arbiter of learning, but traditional teaching strategies, traditional conceptions of the classroom as the private preserve of the professor, traditional grading practices, and traditional conceptions of the meaning of a course, program, and major have received searching attention. In these Carnegie-fostered inquiries we have been forced to reexamine the role of the professor in the learning process. Typically an embodiment of all instructional roles, such as purveyor of information and analysis, guide to the literature, evaluator, diagnostician, and counsellor, the professor has often shied away from carefully studying the interrelationships and implications of these roles. The Carnegie experiments at San Francisco and Bakersfield not only introduced alternate instructional modes, but also succeeded in introducing some faculty role differentiation. Perhaps most importantly, we have found that to begin the process of testing the major propositions of *Less Time: More Options*, we need to focus critical attention on identifying what we want students to learn and become. While we find little systematic evidence to support the Carnegie Commission's assumption that our students enter higher education better prepared that in the past, we must plead *nolo contendere* to a charge of failure on our part to be clear about the complex mission of our institutions. If the Carnegie support has helped begin that process, it must be judged money well spent.

* * *

Propositions Concerning Less Time: More Options

For discussion, Watts and Pentony presented several "one-liners" based upon their paper. They were:

- The carry over from one time-shortening option to another is likely to be significant.
- Inquiry into prospects for shorter time demands a careful look at the desired learning outcomes of an undergraduate education.
- Inquiry into prospects for shorter time demands a creative examination of new teaching strategies.
- Under present circumstances, the three year degree is eminently reasonable.
- Self-paced courses are more cost effective than traditional formats.
- Those options which enrich the quality of higher education are not likely to be time-shortening.
- Those options that are time-shortening are not likely to be enriching.
- Educational quality is not enhanced by credit for experiential learning.

- Faculty will resist conversion to three year degrees.
- Students are not interested in three year degrees.
- The public is not interested in three year degrees.
- Less-time options are frequently more-time options.
- Efforts at large scale conversion to three year degrees must be led by prestigious universities.
- Instant sophomores are likely to graduate with their freshman class.
- Self-pacing leads to self-postponing.
- Postsecondary education is not necessarily higher education.
- Credit for non-collegiate instruction is excused learning, not enhanced learning.
- Challenge courses are more likely to be used in instrumental ways.
- Avoidance of academic redundancy is dependent upon the prior identification of what is redundant.
- Students leaving high school today may be more widely informed while not being further advanced academically.
- In many fields, the meaning of a major is unclear and confused.
- Comprehensive exams for assessment of competencies in the major await identification of desired competencies.

STATE POLICY-MAKERS, ADVOCATES, NEUTRALS OR OPPONENTS*

—John M. Smart and Charles Evans

One of the implicit assumptions of the Carnegie Commission in *Less Time, More Options* was that legislators and other state policy-makers would be interested in, and supportive of, the time-shortened degree proposition. A review of annual compilations of major legislative actions affecting higher education, and of the reported accomplishments of statewide governing and coordinating boards, prepared by the Education Commission of the States suggests that time-shortened degree programs, however defined, do not seem to be high on the agenda of state policy-makers.

Probably the most significant of formal state-sponsored efforts is the Florida program implemented to fulfill a legislative directive which called for the fostering of time-shortened educational programs at all levels in the system of public education. The method of acceleration which has developed relies primarily on credit by examination through the use of CLEP and Advanced Placement examinations. Despite other legislative statements in four or five states including South Carolina, Louisiana, and Hawaii together with State-sponsorship of degrees through examination in programs such as the Regents Examinations (New York) and Thomas Edison College (New Jersey), the time-shortened degree appears to be an idea whose time has not yet come, in so far as legislative, gubernatorial or coordinating agency interest is concerned.

A survey was conducted of selected legislators in states in which are located the Carnegie sponsored time-shortened degree programs and of the chief executive officers of statewide governing boards and coordinating agencies to provide some perspective on the attitudes of key state officials concerning time-shortened degrees. Highlights of the survey's findings are summarized in the following.

Despite the lack of statewide encouragement through directive or dollars, the survey unquestionably showed that the legislators responding in the states polled, as well as the coordinators from across the country, believe that the option should be provided. Also, it should be noted, there is little disagreement shown between the two groups in responses – a fact which may say more about the position and role of coordinators in the scheme of things than about the subject of the questionnaire. From this evidence it appears the initiative for encouraging the extension of the concept must continue to lie with the institutions.

From the perspective of state policy-makers, certain approaches to time-shortened degree programs seem more acceptable than others: credit by examination, concurrent enrollment in high school and college programs, a totally redesigned curriculum on the three-year mode, year-round operations (though some legislators saw little merit in this method), and acceleration within individual courses. Reducing high school graduation requirements and deleting one year of general education requirements are not favored.

Response to the idea of reducing general education requirements might well give pause to those who favor these approaches to time-shortening. The response may, of course, indicate the commonly held expectations for general education are greater than the results.

Three major points should be taken into account by those engaged in such programs or considering them. First, the view that time-shortened degree programs will be of greater appeal to adult or older students. Yet we find that the bulk of experimental programs, save those depending primarily on credit through standardized examinations, are directed primarily to the traditional college age group of 18-24. This may well be a situation where policy-makers see these programs as designed to meet the adult's interest in obtaining a degree as quickly as possible, while higher education is presenting model programs which benefit primarily the younger student.

*Complete survey results will be published in a forthcoming issue of the *Journal for Higher Education.*

Second, 51% of respondents believe that the option provided by time-shortened degree programs would appeal to substantial numbers of students and, another 24% were uncertain, the lack of greater optimism, particularly among coordinators, reflected in these results may not bode well for state-level encouragement. On the other hand, the fact that 60% of the coordinators and legislators said they would actively support legislation and/or budgetary support to develop programs seems to suggest that mere numbers of students may not be the determinant of policy-maker support.

Third, and perhaps most important, is the issue of expected savings. The conventional wisdom is that time-shortened degree programs save money. If a college student takes only three years (or three and a half) rather than four years to complete his degree, it would seem to follow logically that it will cost less to the student personally in tuition paid and to the institution and/or the state in terms of instructional costs. A closer look may cast doubt on this view, especially in terms of costs to the institution. Clearly costs and "savings" may vary. For example, an approach which depends on standardized examinations for granting of credit is an economical and "efficient" method. However, the redesign of curriculum, perhaps on a modularized and self-paced basis, may be costly at the outset and may be more expensive to operate in terms of student-faculty ratio than the conventional classroom-dependent, four-year curriculum.

The survey shows legislators more likely than coordinators to expect savings – perhaps from a perspective of the conventional wisdom which the promoters of time-shortened degree programs have tended to encourage. In fact the coordinators seem surprisingly gloomy about the potential of time-shortened degree programs resulting in long-term cost savings. Seemingly a major rationale for pursuing time-shortened degree programs is not accepted by many key policy-makers at the state level. Even so, the responses do show a willingness to sponsor legislation and/or budgetary support for programs.

Moving beyond the data, it is reasonable to state the truism that the burden of proving the need for a change is on those who wish that change. The notion of the four-year degree program is ingrained in American folklore. Despite recitations of historical precedents, the demonstration of the need for change to reduce the usual term of the baccalaureate is no mean task. We seem to be at a point where most will agree with the time-shortened degree concept in the abstract, but there seems to be remarkably little demonstrated enthusiasm among policy-makers for making it an established fact.

If those who support time-shortened degree programs, especially in public higher education, wish to see them become more available, they must take the initiative at the state level. At the present time, in legislative halls and in coordinating agency offices proponents can expect to find general interest, but typically an interest not easily translated into action, especially if it involves additional dollar support. The often-used rationale of saving the state or institution money should also be handled most carefully for there are, we suspect, many skeptics in the capital. Finally, to speak in terms of reducing general education to the legislator may simply result in unnecessary attacks upon the totems and taboos of many state policy-makers, rightly or wrongly held. One legislator, however, in a forcefully written comment, gives encouragement to those in higher education who seek to provide new options. "It's time we tailored education/learning to the individual student/learner/human – rather than vice versa. Higher education is woefully lacking in flexibility, concern feeling and vision!" To this policy-maker, at least, higher education should take some initiatives for change. And, perhaps, some chances as well.

STUDENT RESPONSES TO TIME-SHORTENED DEGREE PROGRAMS

--A Panel Presentation

A panel representing four New York state programs addressed the hypothesis suggested by *Less Time, More Options* recommendations that significant student interest in time-shortened degree programs will be demonstrated to encourage their continuance.

Thomas Colahan, Vice President for Academic Affairs, State University, Geneseo, characterized Geneseo's program as probably the most successful program in the three-year baccalaureate mode. The three-year, or 90 semester unit program which provides for competency testing for general education work is successful in terms of the quality of the curriculum, the numbers of students involved, and the support from the administration and the faculty. The faculty were prepared for change as the growing institution shifted from teacher training to a multi-purpose college. The program has appealed to the motivated student, a plus with the faculty. For the administration, the program has been a vehicle for stimulus and change. The staff were bored and wanted change, so that the faculty and the administration felt a surge of life with the opportunity to experiment, Colahan noted. The program has been successful and will continue in part because it has been accomplished within the existing power structure and not created as a separate program away from departments and the main college. The program has forced a number of departments to see that there were students in the ranks who were intelligent and wanted to be moved forward. Though not realized by faculty at the outset, curriculum reform has been a major outcome of the program.

In concluding his remarks, Colahan called attention to the matter of students who extend programs rather than seek to complete them more quickly. The "Thousand Year Student" may be encouraged by the system to continue through financial aid and other benefits. Similarly the institution may benefit from persistent attendance. If we don't do something about this, then legislatures will.

Student interest in the Geneseo program reached a high of 60% of the freshman class participating in 1973, dropping to 40% in 1974 and 1975 reported Virginia Kemp, Assistant Vice President. James McNally, Director of Institutional Research, described evaluation studies being conducted which note a tendency for a substantial group of students who enter the time-shortened program to shift to the four-year curricula.

The demise of the Allen Center at Albany was described by Seth Spellman. He agreed with the point made by Tom Colahan that one should make sure that experimental programs are tied into what is identified as the central mission of the campus involved. If you are identified as not being related to the central mission, then the program is in jeopardy, Spellman said. The faculty positions for the Albany Program were reallocated from other areas of the university when the program began in 1972, he continued. With budgetary and space limitations the projected enrollment for the program, located on the old, downtown campus, was reduced. Next an internal review committee originally charged with reviewing academic program priorities and established in response to pressure to eliminate certain doctoral programs, identified the program as not being essential to the mission of the university.

Subsequent budget reductions for SUNY, Albany led to the decision to close the program to recapture the faculty positions previously assigned. The committee, which made the recommendation had looked with disfavor on the three-year aspect of the Center program, but at the same time were quite favorable about the academic program. Generalizing from this experience, Spellman observed that when it is necessary to tighten things up in terms of budget, organizationally we tend to fall back on that which is familiar. The time-shortened degree program and the academic program at the Albany Center were new and were nontraditional. They were not identified with the departments of the university and thus could be easily lopped off. In retrospect, Spellman concluded, joint appointments to the Center and to departments should have been used.

Armand Burke ascribed the success of the Brockport program, which enrolls 750 students in a three-year program, to the fact of its existence in a large undergraduate liberal arts college with a track record of educational entrepreneurship and a readiness for change. The setting of a university center or a small conservative liberal arts college would lead to a much different outcome, he asserted. At Brockport the Alternate College is seen as an experimental laboratory which has spillover effects on the larger college. Interesting experimentation has gone on with the sharing of faculty and faculty are impressed with students from the Alternate Coll_ge.

Speaking from the perspective of the Shaker program, Arthur Walker foresaw a continuance of the program with growing student interest. Of concern for the future is the extent to which programs might be expanded to other high schools in the state. For high school faculty to teach college courses is a significant stimulus leading to strong support for this kind of program.

TIME-SHORTENED DEGREE PROGRAMS IN PERSPECTIVE

---A Panel Presented by Staff of the Center for Research and Development in Higher Education, U.C., Berkeley

Leland Medsker in noting that someone had recently proposed that the Berkeley Center be renamed the Center for the Study of Short-lived Phenomena said he did not mean to suggest that time-shortened degree programs were necessarily short-lived, but it did seem to him that much in higher education seems to come and go. The Carnegie funded programs were supported for a purpose, not just to assist the campuses represented at this meeting in creating something new, but also for the possible transfer value that this experimentation may have for the whole of secondary and postsecondary education. We should address the transfer question, he proposed.

In the future, the educational environment must be considered if there is to be transference, Medsker continued. The numbers and different kinds of institutions must be considered in looking at this educational environment. Particular attention should be paid to the community colleges – which do figure in some of the experiments. When we consider reducing the time it takes for a student to complete high school and the baccalaureate degree, we must remember that the two-year colleges play a great role. Another aspect of the environment is the increasing proportion of part-time, older students in our institutions. The full-time student is fast becoming a minority. Less than half of all students in postsecondary education are in the 18-21 year old group and over 10% are more than 35 years of age.

Though the younger student and time reduction in high school and college remain an important concern, surely in these days we won't limit our thinking in terms of time-shortening to that decreasingly small group. We must think about the older student and the part-time student.

Also as we think about the environment, Medsker continued, we must realize that the division between high school and college is very arbitrary and that it doesn't conform to the increasing early social and intellectual maturation of young people. Though high school students don't necessarily come out better prepared, they are different kinds of people than they once were. There is a great overlap of work between high school and college. We should talk about the ways in which to capture the significance of the senior year.

Another concern in extending the time-shortened concept is its relationship to the competition among segments of K-12 and postsecondary education for students and money. We must, as Alden Dunham pointed out, concern ourselves with the amount of money which will be available. The public will make the decisions as to what will be supported. We who are instruments of the public have to implement those decisions and we hope to influence them as well.

Time-shortened programs are probably best expressed by the term "time variable," Medsker observed. Students both young and old will demand that there be an opportunity to accelerate work and that they be given a much greater latitude in how best to accomplish it. There must be an element of flexibility that prevails that has never before prevailed.

Stewart Edelstein summarized some of the implications of research done at the Berkeley Center concerning extended degree programs as well as three time-shortened degree programs in New York. External degree programs and time-shortened degree programs share basic techniques. One category of programs is primarily classroom-based with the credit hour as the unit of measurement but with variation in the time at which instruction is given, perhaps over four or five weekends or in two to three week time blocs. Another category of programs has made severe revisions in the curriculum delivery and curricular patterns. Major courses may be dispensed with the area studies substituted. In some instances the general studies core is eliminated or reduced to accomplish time-shortening. Programs of individualized study have eliminated the

credit hour as a measurement for the degree and replaced it with either competencies, months of study, or a number of contracts. Another category of programs is the degree by examination including assessment of prior learning. The programs are learner-centered and have received accreditation though there may be some skepticism. Although they have typically started with one basic approach, they now offer a variety of learning techniques to enable the student to obtain his degree. Flexibility, the Berkeley group found, was necessary so that programs can adapt to changing interests and changing needs.

Janet Ruyle stated that nearly all students surveyed in their study of non-traditional programs had been attracted to the particular program by its flexibility. Other reasons included chances to earn credit for prior experience, earning a degree in a shorter period of time – though this may mean in five years rather than ten. The faculty surveyed believed a three-year program could be accomplished, but cautioned that requirements should not be diluted. Stephen Lovette raised the point that perhaps duplication for some students is preferred, permitting them to remain in college longer, until things get better. Some students look at going to college as getting nowhere fast, and the time-shortened degree is getting nowhere faster.

John Shea addressed the matter of costs and time-shortened degree programs. The question, he said, is whether we can obtain the same or better product with the kind of quality education we wish at a lesser cost. In time-shortened degree programs the students do indeed save money, so long as they actually shorten the time they spend in college. Colleges, on the other hand, may not reduce costs. In some instances they incur higher average costs per year of instruction than they would otherwise. This is so because students spend less time in general education, lower division level courses which are more cost-effective than those of the upper division. Another issue is whether the students attracted to the time-shortened program otherwise would not have attended the institution or higher education at all. There may be benefits to the four-year student which derive from the time-shortened degree program as faculty may devote more attention to courses which other students are seeking to avoid by taking the three-year option. In terms of the total system of higher education, there may be a cost impact of somewhat more students because of the time-shortened option. There may be some impact on graduate programs in instances where students can use a fourth year of financial aid eligibility to go further than they would have otherwise. Start-up costs for time-shortened degree programs have varied widely; in some cases recruitment has been the big emphasis. Administrative costs may be higher if a new entity is created within the parent institution. The costs of faculty planning time may be weighed against what they might be doing otherwise – research or minimally productive committee work. Student advisement costs may be substantial.

In closing the panel discussion, Lee Medsker asked if we can foresee the day when we will really have restructured our educational system? Finally, he noted that no one in two days of discussion had raised the notion of the middle school.

A SUMMARY

—JB Lon Hefferlin

At the end of the third of these conferences on time-shortened programs and influenced by a recently concluded World's Series, I'd like to summarize where we seem to be in terms of three scores:

First, regarding the twelve programs represented here, the score clearly is twelve for the Carnegie Corporation and zero for the forces of ignorance. These twelve programs seem an admirable example of the results of enlightened philanthropy: they demonstrate the wisdom of systematic foundation support for innovation at diverse institutions, and they confirm the observation of Christopher Jencks in 1965 regarding foundation support:

> The history of academic innovation is one of dissident minorities within the university winning outside financial support for their ideas . . . to enhance their position. In today's curriculum impasse the dissident minority already exists; the missing ingredient is external support.

Rather than concentrating its aid to time-shortened programs only on one or two "flagship" campuses, the Carnegie Corporation wisely backed innovative faculty and administrators at a variety of colleges and universities. As a result, it has not only affected thousands of students and hundreds of faculty members, as Alex Sherriffs noted, but also it has permitted the comparative testing of different means to a common end, thereby aiding further reform at other institutions in the future. Thus all of us in higher education are beneficiaries of the Carnegie Corporation's support of these programs and of these three conferences.

Second, in terms of the two themes discussed by the Carnegie Commission on Higher Education in its 1971 report *Less Time, More Options*, it looks like an even tie. Many of the participants in this conference are deeply concerned with making education more efficient and taking "less time"; but an equal number seem equally interested in making education more effective through "more options." Thus, despite the common element of time-shortening among all twelve programs, I sensed as much discussion during the conference of "time variable" and "time flexible" programs – in terms of adapting the programs to the particular needs of individual students – as of "time shortening" itself.

Indeed, given present emphasis of the twelve programs I think the third score on a three-year baccalaureate versus flexible time must be chalked up as only about two to ten or one to eleven. If any in the country were champions of a three-year undergraduate program, I would have thought they would be in this room. Hence I've been intrigued that few of the speakers have been adamant proponents of the idea. Robert Bersi told us that 95 percent of the program directors he surveyed this year responded that time-shortening remains one of the goals of their program – but interestingly enough, not necessarily shortening to three years. And I sense his statistics are true from my own informal observations of the past two days: I would have thought that the leaders of twelve of these programs would have advocated time-shortening so vigorously that they would have voted to complete the conference by last night and turn their attention to something else today. But instead, not only are we using all three days assigned us – we're even running past our scheduled time of adjournment!

What do these scores, and our own use of all the time and more that was allotted to us, bode for the future regarding the three-year degree? The Carnegie Commission, you'll recall, proposed in *Less Time, More Options* that by 1980 the average time of most undergraduates' programs should be reduced to three and a half years and to three sometime after 1980. Does this recommendation still look realistic? Probably everyone would agree that a three-year baccalaureate – or even less – should be the *option* for anyone interested in it and capable of it; but should it become the goal of most students and the norm for all of them? As David Provost asked earlier, is acceleration only a ripple, or the wave of the future? Is it likely that we can fulfill Alden Dunham's hopes of wringing two excess years out of our sixteen-year pattern of schooling, and eventually award the bachelor's degree at what is now the end of the sophomore year?

My own impression is that for a variety of reasons, we as educators are unlikely to move much beyond our interest in "time-flexible" and "time-variable" programs as evidenced at this conference. By ourselves, we're unlikely to succeed in making the three-year baccalaureate the norm. Despite the aid of the Carnegie Corporation and the recommendations of the Carnegie Commission, the trend of American higher education is against acceleration. Without greater outside pressure or internal incentive, institutions have little to gain from the effort. Until students or government push more institutions to follow the lead of these twelve programs, they will remain an important but unemulated experiment: a model admired for time-flexibility but not followed for time-shortening.

Not all this reluctance to adopt the three-year concept stems from institutional inertia and protectiveness. Part of it stems from the very function of higher education in American society. We talk often about the functions of colleges and universities for education and certification of their students – but we sometimes forget their historical function of incarceration or adolescent sitting. You may recall Lord Bryce said of studies and examinations at Oxford and Cambridge for the sons of English nobility that they served to prevent the evils which idleness would encourage – and, for better or worse, what Oxford and Cambridge achieved for England's elite, American colleges and universities achieve for many American youth. For easing the transition of its young adults from their roles as sons and daughters to that of independent citizens, American society has not yet discovered a better institution. When and if it does, our colleges will accelerate instruction accordingly.

A second reason for inaction stems, I suspect, from our belief as educators in the importance of our work. No one should expect teachers and college professors to propel their students more rapidly through school and college and send them away to work and adult responsibilities any sooner than necessary. Such an expectation would be comparable to expecting the physician to send his patients away to Christian Scientists, other faith healers, or other nonprofessionals. Innately, education expands to fill whatever time is available for it, simply because educators believe in it.

Many educators will undoubtedly agree with Alden Dunham that our essential task for the future is better education at less cost; but in terms of the difference between "less time" and "more options," few of them are likely to advocate shorter education as well. Instead, they're more likely to agree with enriched and more effective education at less cost over the same length of time, by all sorts of means – among them, personalized systems of instruction, instructional technology, improved articulation and reduced duplication between school and college programs, more efficient management, experiential education, learning modules, as well as time-flexible programs – all of which have been aided by the Carnegie Corporation and other foundations. Similarly, they will most likely advocate better certification and better credentialing at less cost, through external degrees and standardized testing programs such as New York's Regents' Degree and the College Level Examination Program – also assisted by Carnegie. But it seems inevitable to me that they will advocate enrichment in learning and improved efficiency in certification or credentialing in preference to time-shortening.

The final reason for this conclusion is the evidence from history, when the same proposals for reducing the length of the college program to three years were made in the last decades of the nineteenth and the first decade of the twentieth centuries. Then as now, articulation of school and college programs was imperfect; learning seemed inefficient; and the advantages of college graduation at an earlier age were obvious not only to students but also to administrators and faculty of the newly developing graduate and professional schools. Charles W. Eliot and other university innovators championed the three-year baccalaureate then; but in his 1909 inaugural address as president of Harvard, A. Lawrence Lowell killed off Eliot's three-year movement at Harvard and thus throughout the rest of American higher education with one sentence: "The most vital measure for saving the college," he argued, "is not to shorten its duration, but to ensure that it is worth saving." If the freshman year of college merely repeated the senior year of secondary school, the solution was not to abandon the freshman year but to reform it. If the required collegiate program was stultifying, the answer was not to reduce the length of stultification but to revitalize its entire length. For Lowell as for most educators today, I gather, the choice was not "less time" but instead "more options"; individualization and enrichment, not acceleration.

In sum, the concepts of the three-year baccalaureate and of college graduation after fourteen rather than sixteen years of schooling have a long and honorable history in American higher education. Advocated for nearly a century, they have now been proven feasible by the institutions represented at this conference and by the generosity and imagination of the Carnegie Corporation. No question need remain about the practicality of the ideas: as a result of Carnegie-funded experiments, we now know ways to implement them successfully. The time may yet come for these ideas not only as an option for the few but as the norm for the many; and if it does, American higher education will be ready, thanks to you in this room.

Yet the further implementation of these ideas will require more than foundation funds and institutional initiative. Until they are demanded by those outside the academy, the lessons we have learned from your experiments will be applied within the academy largely to increase flexibility and enrich educational opportunities – for more options, not less time. Even this in itself, however, is cause enough for celebration and congratulations!

APPENDIX A

Programs Represented:	Type of Experimentation:
Appalachian State University "Admissions Partnership"	Early admission; college courses in high school; reduction in general education.
Bowling Green State University "Modular Achievement Program"	Acceleration through credit granted on basis of freshman year performance.
California State University and Colleges Bakersfield "Pace"	Modularized courses; credit by examination.
Dominguez Hills "Small College"	Restructured degree program.
San Francisco	Modularized courses; independent study.
Colgate University "Colgate-II"	Restructured curricula.
State University of New York Albany "James E. Allen, Jr. Collegiate Center"	Linking of high school and college; interdisciplinary modularized instruction.
Brockport "The Alternate College	Restructured curricula on three-year basis (96 sem. hours); high school bridging; self-pacing; contract learning.
Buffalo "Early Admission and Individualized Major Programs"	Early admission following "no risk" summer school at end of junior year.
Fredonia "3-1-3 Program"	Concurrent high school college work for cooperative "bridge year".
Geneseo "Three-Year Degree Option"	Reduction of general education for students doing well on examinations.
Plattsburgh-Shaker High School-Hudson Valley Community College	Transferrable college courses taught by high school teachers.
University of Illinois – Champaign "The Three Year Baccalaureate Study"	Early admissions; proficiency examinations.

APPENDIX B

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